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WATER RESOURCES DEVELOPMENT ACT OF 1990

HEARINGS

BEFORE THE

SUBCOMMITTEE ON WATER RESOURCES,
TRANSPORTATION, AND INFRASTRUCTURE

OF THE

COMMITTEE ON
ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

ON

S. 2183

A BILL TO PROVIDE FOR THE CONSERVATION AND DEVELOPMENT OF WATER AND RELATED SOURCES, TO AUTHORIZE THE UNITED STATES ARMY CORPS OF ENGINEERS CIVIL WORKS PROGRAM TO CONSTRUCT VARIOUS PROJECTS FOR IMPROVEMENTS TO THE NATION'S INFRASTRUCTURE, AND FOR OTHER PURPOSES

MARCH 1 AND APRIL 19, 1990

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WATER RESOURCES DEVELOPMENT ACT OF 1990

THURSDAY, MARCH 1, 1990

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
SUBCOMMITTEE ON WATER RESOURCES,
TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:05 a.m. in room 406, Dirksen Senate Office Building, Hon. Daniel Patrick Moynihan (chairman of the subcommittee) presiding.

Present: Senators Moynihan, Lautenberg, and Reid.

OPENING STATEMENT OF HON. DANIEL PATRICK MOYNIHAN, U.S. SENATOR FROM THE STATE OF NEW YORK

Senator MOYNIHAN. I wish a very good morning to our witnesses and our guests.

This is a regularly scheduled meeting of the Subcommittee on Water Resources, Transportation and Infrastructure. We are going to hear testimony on the Water Resources Development Act of 1990.

It has been the object of our subcommittee and committee since 1986 to try to do a water development bill on a biannual cycle each Congress, and doing so in a manner that follows a very orderly process developed over the years by the United States Army Corps of Engineers and which our staff, particularly Mr. Weiss, has been very thoughtful in developing, which is to say that this committee will not authorize a water project until it has gone through a reconnaissance study, a feasibility study, a division office approval in the Corps structure, a completion of an environmental impact statement, approval by the Corps of Engineers, and finally by the chief of engineers.

We have a number of such proposals before us today, and each fulfills these criteria, one of which is in the State of New Mexico, and we are going to hear from the very welcome guest, the Mayor of Belen, Mayor pro tem of Belen, New Mexico. And our good friend, Senator Domenici, and if he will give us just a moment, we will welcome you.

We have adopted an informal rule in this year's proposal which is as regards water projects, the State of New Jersey receives 50 percent of all authorizations, the remainder to be negotiable with the Senator who so distinguishes this panel.

And so, I now turn the remarks over to my friend, Senator Lautenberg.

OPENING STATEMENT OF HON. FRANK R. LAUTENBERG, U.S. SENATOR FROM THE STATE OF NEW JERSEY

Senator LAUTENBERG. I thank my distinguished colleague and friend who lives in a suburb of New Jersey and often has to deal with our heavy-handed will. But he is always gracious no matter how difficult the circumstances.

I do appreciate, Mr. Chairman, your convening this hearing and having the opportunity to talk about a subject of great interest to me.

I want to also welcome our distinguished colleague, Senator Domenici, with whom I have spent considerable time lately as we try to cleanse the air and make the environment better.

And I also greet General Kelly and Mr. Page. I am, unfortunately, not going to be able to stay to hear your testimony because I have a hearing this morning of the Appropriations Committee's Subcommittee on Transportation. And I, Mr. Chairman, with your grace will have to leave before this hearing concludes.

Senator MOYNIHAN. Sure.

Senator LAUTENBERG. I have a short statement, and I hope to have the opportunity to ask a few questions.

I would just like to note for my colleagues that as has been amply noted by the Chairman, that the largest project proposed for authorization in the bill is the Passaic River Basin Flood Control Project. And as the distinguished Chairman of the subcommittee knows, there is strong sentiment in my State that the proposal, as we see it, needs modification. The project is a comprehensive flood control effort much needed in an area that now suffers almost $100 million annually in losses from floods. In 1984, a flood caused $335 million in damages and forced the evacuation of 9,400 people from their homes.

The project includes the acquisition of over 5,000 acres for flood retention and a series of levies to control flood waters. I think everyone knows that New Jersey is the most densely populated State in the country, and we do not have a lot of room to move around. So, we have to take advantage of the engineering and technical opportunities that are available to try and make as much of the area as inhabitable as we can.

Much of the focus of attention of this project is on the tunnel that is intended to divert flood waters from the upper Passaic River. As proposed by the Corps, this tunnel would have its outlet near Nutley, New Jersey. This plan has been met with great concern by those living in that area and, therefore, it has been proposed that to alleviate the impact on those down-river areas, that the tunnel be extended a few miles to Newark Bay, a much wider expanse of water, so that in the event of a major flood, we do not have this rush of water coming out and raising the height to where it attacks the infrastructure along the river bed. I obviously support that extension.

Mr. Chairman, by way of interest, I am a Nutley High School graduate. It has nothing to do with that.

Senator **Moynihan**. You do not want to see it swept away.

Senator **Lautenberg**. Exactly. We have a lot of activity along that river and that has become a place of habitation. And if we are going to build this tunnel and have it empty there, it could create an enormous problem.

The option was reviewed by the Corps. In fact, it was found to be environmentally preferable to the present plan, but for cost considerations, it was not recommended in the final report that the Chief of the Corps put out.

Mr. Chairman, this committee and the Congress has always reserved the right to review and to modify the proposals submitted by the Corps. Now, this is a case where that right should be exercised.

I filed an amendment, Mr. Chairman, to the bill to authorize the extension to Newark Bay. Floods in the Passaic River Basin impose tremendous economic costs and tragically the loss of life from time to time. With this project, we have the opportunity to prevent those losses.

I look forward to working with the Chairman and my other colleagues to see this project authorized with the tunnel extension to Newark Bay, and I thank you, Mr. Chairman.

Senator **Moynihan**. Certainly.

Senator **Lautenberg**. I have a couple of questions after Senator Domenici.

Senator **Moynihan**. Right, and Senator Reid wanted to make some remarks about the Truckee Meadows I believe and Pyramid Lake perhaps. I know that there is a provision in a section about that.

OPENING STATEMENT OF HON. HARRY REID, U.S. SENATOR FROM THE STATE OF NEVADA

Senator **Reid**. Thank you very much, Mr. Chairman. I really am grateful that the committee is holding hearings today on S. 2183, the Water Resources Development Act of this year.

I have a particular interest in two projects in this legislation that are of importance to northern Nevada. These projects involve, as you have indicated, Truckee River and the Pyramid Lake. Specifically, they involve providing improved fish access to the lower Truckee River from Pyramid Lake which sits at the terminus river, and improving the riparian habitat of the lower Truckee River.

For the past three years, I have been facilitating negotiations between the major water users on the Truckee River system, including the United States, in an attempt to reallocate scarce water supplies and end 80 years of litigation. An important goal in these negotiations has been to improve the possibility of recovery for an endangered species that inhabits Pyramid Lake and the lower Truckee River.

The cui ui has been indigenous to Pyramid Lake and the Truckee River for over 5,000 years when substantial amounts of water were diverted from the Truckee River.

I might add, Mr. Chairman, this is the first Bureau of Reclamation project ever, the Newlands project, in 1902. And, in effect, what it did is take the Truckee River and divert part of it out into the desert which dried up Winnemucca Lake and almost dried up Pyramid Lake. In fact, at the beginning of the century, as I indicated, this Truckee River was diverted to provide agricultural water. Pyramid Lake thereafter dropped some 70 feet, and the cui ui all but disappeared. These fish, the cui ui, were the very first species ever to be placed on the endangered species list under the Endangered Species Act, and serious efforts have been under way in recent years to save this fish.

Reallocating water for the benefit of the fish is a vital part of our proposed Truckee River water settlement. However, Mr. Chairman, we cannot recover the species by simply reallocating water. There are two other important elements in this effort.

First, a large delta has formed at the mouth of the Truckee River as it enters Pyramid Lake. In all but flood years, the delta creates an impassable barrier to the cui ui when they attempt to move into the Truckee River to spawn. Section 203 of the Water Resources Development Act of 1990 contains authorizing language for the Corps to develop a plan to enable efficient passage of the cui ui through or around the delta. I cannot overemphasize how important such access is to any chance of recovering this endangered species.

The second project, also contained in section 203, provides authorization for the Corps to develop a plan to rehabilitate the habitat of the lower Truckee River where the cui ui spawn. Under the Flood Control Act of 1954, the lower Truckee River was recoursed. This channelization effectively destroyed the spawning habitat in the lower Truckee and greatly inhibited the ability of the cui ui to successfully spawn. In effect, Mr. Chairman, what the Corps did is made a freeway out of the river. It had the nice, little, gentle areas where fish spawn, and with the freeway, they are not able to do that now. So, we are asking the Corps to come up with a plan to restore the riparian habitat and vegetative cover to stabilize the course of the lower Truckee River and minimize erosion damage and provide the best possible spawning for the cui ui fish.

The basis for turning to the Corps for help in our efforts to recover the cui ui is the authority granted to the Corps under the Water Resources Act of 1986 to enter into a project that will enhance the environmental quality of our water resources and to mitigate past environmental damage caused by previous actions.

Once again, Mr. Chairman, let me reiterate the importance of these two projects, not only to our chances to recover this endangered species, but to help facilitate an agreement that can end 80 years of water wars on this small desert river.

Senator **MOYNIHAN**. That sounds like a particularly attractive project to take a set of beginnings which were flawed, as most beginnings are, at the turn of the century and get it straightened out at the end of the century. I am sure the Corps will take it up and see this as a real opportunity. And I see Secretary Page agrees.

Senator **REID**. Mr. Chairman, I am not going to go into detail here, but even the President has agreed that something should be done because there has been $2 million included in the President's budget this year to buy fresh water for the Stillwater Marsh, which is part of this whole program here. The Stillwater Marsh is a part of the North American flyway, and it has gone in recent years from 50,000 acres to a little less than 3,000 acres of very, very bad water. Fish are dying by the thousands, and so are the birds. And, by preserving this marsh area, it will save the canvas-back duck and greatly facilitate the breeding of the mallards and other species.

Senator MOYNIHAN. I think we can all get behind you on that score.

Senators Burdick, Chafee, and Warner have statements which I would like to place in the record at this point.

[The statements referred to follow:]

OPENING STATEMENT OF HON. QUENTIN N. BURDICK, U.S. SENATOR FROM THE STATE OF NORTH DAKOTA

I want to welcome the Assistant Secretary of the Army, Mr. Robert Page, to this hearing. Mr. Page has gone out of his way to meet with the people of North Dakota on their drought related problems in the last two years, and I thank him for his efforts.

I believe that we have our work cut out for us if we are to pass Water Resource Development legislation this year. We need to work together Mr. Secretary, as we did in 1988. In my view, this means that we in Congress must continue to adhere to the cost sharing and user fee reforms of the 1986 Water Resources Development Act. And it also means, Mr. Secretary, that the current administration must adopt the realistic expectations of the previous administration in evaluating proposed legislation.

Because your tenure as Assistant Secretary bridges the two administrations, I have every confidence that we will be able to work together to continue the biennial enactment of Corps water resources legislation.

I have a number of questions which I would ask that you answer for the record. Most of these questions concern management issues Mr. Secretary. I am deeply concerned that while the process for implementing new water projects has developed a new partnership for financing such projects, this process has not led to the full partnership which Congress envisioned in 1986.

I am even more concerned that when it comes to the management of water resources the Corps has forgotten that it is Congress which authorized its missions, Congress which defined its missions, and is Congress alone which can and should redefine those missions. I am concerned that military commanders of a civilian agency remember that it is the responsibility of Congress to define the scope and limits of their authority to manage civil works. I am concerned that these commanders have come to use the concept of "discretionary authority" as a panacea to resolve policy issues in the field, rather than raising them for resolution by Congress.

Mr. Secretary, we cannot change the criteria for project development after the fact. We cannot define "federal interest" in water projects more narrowly than does the law. We cannot impose policy guidance without adequate public comment and review.

It is my view Mr. Secretary that the Congress and the public expect the Corps of Engineers to be THEIR partners in water resources development and management, not the other way around.

OPENING STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Mr. Chairman, today I am pleased to join with you, Senator Burdick and Senator Symms in the effort to report a water resources bill for 1990. Introduction of S. 2183 and the scheduling of hearings on the measure represent a continuation of this Committee's commitment to enact authorizing legislation for the United States Army Corps of Engineers civil works program on a biennial basis.

As you know, Mr. Chairman, the 1970's and early 1980's saw a departure from the previous practice of approving omnibus bills and predictable appropriations to fund the construction of water projects. In 1986, however, we broke the logjam. After years of legislative-executive policy confrontations over the role of the federal government in water policy, the 99th Congress approved the Water Resources Development Act of 1986.

The 1986 Act was truly landmark legislation in the area of water policy and formed the basis of the Water Resources Development Act of 1988 and the bill we are reviewing today.

Mr. Chairman, S. 2183 is a straightforward piece of legislation. Title I authorizes eighteen water resources projects from across the country. All of the projects, I might add, have completed the Corps planning process. Furthermore, the Chief of Engineers has determined that the projects are both economically and environmentally sound.

Title II contains seven project related provisions, with Title III focusing on policy changes to the 1986 and 1988 Water Resources Development Acts. Let me say here at the outset, however, that I do have concerns with a number of provisions in Title III that, in my view, would inhibit the ability of the Army Corps to evaluate prospective projects and effectively manage operations at water project sites. It is imperative that the Corps have the flexibility to manage and respond to a changing water environment.

Let me end by saying that the goal of this legislation is to authorize a steady flow of sound projects for the Army Corps of Engineers. As our former colleague Senator Stafford said in 1988, if the water bill "becomes a magnet for . . . ill conceived policy initiatives, the experiment will have been a failure and we will have learned something about Congress' ability to successfully regularize the Corps of Engineers authorizing process." The key is to remain faithful to the provisions of the 1986 Act.

Mr. Chairman, I intend to work closely with you and our colleagues on the Committee to report an economically sound and environmetnally sensitive piece of legislation.

OPENING STATEMENT OF HON. JOHN W. WARNER, U.S. SENATOR FROM THE COMMONWEALTH OF VIRGINIA

Mr. Chairman, I am pleased that this hearing on our nation's water resources is being held today and I am grateful that Secretary Page could join us.

I look forward to the Secretary's comments on the bill introduced this week by Chairman Moynihan authorizing new water projects and the Secretary's comments on what provisions may be included in the Administration's bill.

Mr. Chairman, I have been privileged to work with this committee, even before I became a member, and the Corps of Engineers since my first days in the Senate to authorize the construction of the Norfolk Harbor and channels deepening. Hampton Roads has been the nation's leading exporter of coal, but in recent years it has also become our nation's largest port in the export of all types of cargo.

The enactment of the Water Resources Development Act of 1986 enabled the State of Virginia to become the local sponsor and to move forward with this long-awaited project. The first phase of deepening the Norfolk channels to 50 feet has been completed and we are aggressively proceeding with plans for the next phase of a 55 foot outbound channel and the Atlantic Ocean channel.

The Norfolk Harbor and Channels deepening remains important to the mobility of our Navy, and its completion is vital to Virginia's economy and with this Federal/State partnership the port is playing a major role in improving our balance of trade.

Elsewhere in Virginia, local governments and the Corps of Engineers are actively involved in six major flood control and hurricane protection projects totalling over $430 million.

This significant investment in water resource development by the State and local governments to improve protections to life and property from the destruction caused by severe floods and hurricane demonstrates our commitment to the cost-sharing principles of the 1986 Act.

Generally, I commend the Corps for refocusing their programs to recognize the local sponsor as an equal, financial partner in water resource projects. I must add, however, that there are two Corps policies which I disagree with and I hope the Committee will carefully review when proceeding with the 1990 Water Resources legislation.

The first policy I find objectionable is the Corps' single user policy when applied to public facilities. By their very existence, public facilities such as sewage treatment plants, are financed by taxes levied by the local government. They must be part of a project's total costs to be shared between the Federal Government and the local sponsor. These facilities are not commercial beneficiaries of the project which can contribute directly to the project costs. The funds come from the same source as the non-Federal share—the local government.

The second policy which I believe unfairly discriminates against poor local governments who desperately need flood protection for their economic stability is the Corps' "Ability to Pay" regulations. The legislative intent of the 1986 Act is clear. No community should be denied needed flood protection simply because they cannot afford the project. The "Ability to Pay" regulations do not accomplish this objective. In Virginia, flood control projects in Buena Vista and Grundy will not be constructed without a re-examination of these regulations.

Mr. Chairman, there are other issues important to Virginia which I look forward to discussing with you as this legislation moves forward. These issues include the authorization of the flood control project for Buena Vista pending a favorable Chiefs Report due in June, 1990; a reimbursement for the Roanoke Memorial Hospital for floodproofing work performed on the Roanoke River, which the Corps supports and clarifications for the Virginia Beach Hurricane Protection and Beach Erosion Control project which must be completely redesignated by the Corps.

I sincerely hope that the Committee does produce a bill this year and I stand ready to be of assistance in any possible way.

Senator MOYNIHAN. I would invite our good friend and neighbor, Senator Domenici, to offer what thoughts he may have. I know that Mayor Garcia will be testifying shortly.

Senator DOMENICI. Mayor Garcia will testify, Mr. Chairman, when you are ready. I just thought I could give a few opening remarks, and you could get back to your agenda.

Senator MOYNIHAN. Please, Senator.

STATEMENT OF HON. PETE V. DOMENICI, U.S. SENATOR FROM THE STATE OF NEW MEXICO

Senator DOMENICI. I just wanted to reminisce. Some 17 years ago my first assignment sat me right here in this seat. I recall that Senator Montoya from New Mexico was still on the committee. And he was the second ranking member, and I was way down here on this end in the minority. I thought it would be a long time before I would ever get anything done.

Senator MOYNIHAN. You're still there.

Senator DOMENICI. I'm still here.

I left the Committee and came back for a while.

Mr. Chairman, let me just quickly thank you for including my bill, a small project, in your omnibus bill.

And let me reminisce again with you for a moment. Years ago when we were addressing the issue of new water projects, you, Mr. Chairman, and I were part of trying to establish a rational national policy which you might recall was tempered by the notion that, because we paid for them 100 percent, we frequently built white elephants. And you and I were trying to find a bit of a marketplace idea to inject into these projects. That started when we were talking about the new offshore ports that we were going to build. Remember that, Mr. Chairman?

Senator MOYNIHAN. Right.

Senator DOMENICI. Well, we finally got a cost-sharing bill for water projects. When we finally put that together, we put a rather unheralded section in that bill that said in the event a project did not have the right cost-benefit ratio, therefore it would normally not be considered. But if the community or area that was affected wanted to pay more than the 25 percent cost-share, they could ask the Corps to evaluate it, and if we received a commitment from the community, we could proceed.

Well, I am here to tell you this project is probably the first new one under that provision. We have a very small city. It is not a rich city. They have had a very, very serious flood, and they live under threat of more flooding. But the cost-benefit ratio is slightly off because while the city will be devastated, the only way to move the water to the river is by a very large canal extension. So, it adds to the cost.

We now have found that if the City of Belen pays 38 percent of the cost instead of 25 percent, we have accommodated the Federal Government's normal ratio interests, and the community has committed to pay more than that which is prescribed in the statute. And that is precisely what this section of the Act that we helped prepare permits.

Senator MOYNIHAN. Right.

Senator DOMENICI. And so, you will hear from the mayor pro tem later on. He will tell you that this community is very worried about the future.

They were very depressed when they found that we could not fit this within the normal, rather automatic type cost-sharing project. And then we discovered that, indeed, if they were willing to pay more than is being paid in the country as their share—in this case, it is a very large share, 38 percent, but obviously they want it and they want to pay for what this law requires. They are going to pay more than $6 million as their share. I think it is going to be $7.4 million, and we will pay $19 million, and the City of Belen perhaps for the first time in modern history will be free of the risk of major flood.

Details will be submitted along with statements by elected officials and representatives of the community by Mayor Pro Tem Gilbert Garcia, who will be accompanied by a member of the city council of Belen, Rudy Sachs.

I thank the Chairman and members of the committee for letting me describe this. And in due course, I thank you for hearing my constituents.

[Senator Domenici's statement follows:]

STATEMENT OF HON. PETE V. DOMENICI, U.S. SENATOR FROM THE STATE OF NEW MEXICO

Mr. Chairman, Members of the Subcommittee.

As a former member of this Committee, and as a former ranking member of a predecessor Subcommittee, I appreciate the opportunity to testify on behalf of legislation that is very important to the welfare and future of the City of Belen, New Mexico.

I am accompanied this morning by the Honorable Gilbert Garcia, Mayor Pro Tem of the City of Belen.

Mr. Garcia has worked long and hard to make this project a reality. I commend his leadership and that of his fellow members of the City Commission. And I am delighted that he is here with me this morning to present to you the views of the City of Belen.

I was pleased to introduce S. 923 last spring with the co-sponsorship of my colleague [Mr. Bingaman].

Thank you for calling this hearing, Mr. Chairman, and I am particularly pleased that you have included the text of S. 923 as Section 201 of your omnibus bill, S. 2183.

S. 923 and Section 201 authorizes the Amry Corps of Engineers to construct a flood control project to protect Belen from the serious runoff danger that now faces that community. When thunderstorms rip across the mesas and watershed west of town, flood waters have poured into the City of Belen on several occasions—most notably in 1969 and again in 1980. In places, I am told, the flood waters reached depths exceeding 15 feet following the 1969 storm.

Belen's problem is that it sits in a bowl. Mesas and high ground stand to the west. The Rio Grande runs east of the city. And the bed of the Rio Grande, according to calculations by the Corps, is actually higher than some adjacent portions of Belen.

S. 923 and Section 201 authorizes the Corps to construct a project that captures that mesa runoff, then diverts the water safely around the City to the Rio Grande.

The project would widen and deepen an existing irrigation canal, known as the Highline Canal, which is owned by the Middle Rio Grande Conservancy District. With an enlarged capacity, the canal would capture all the mesa runoff, preventing it from over-topping the canal and flooding Belen.

Because of the topogrpahy that I have described, the project will have to move that runoff water about six miles downriver before it can be dumped into the Rio Grande. This lengthy diversion is what makes this project relatively expensive.

One of the most interesting aspects of this bill is the cost-sharing that Senator Bingaman and I have proposed.

All Federal flood control projects, as the members of this Committee know, now require at least a 25 percent contribution from non-Federal interests.

But because of the unusual topography of Belen, which I have mentioned, the Corps has been unable to design a project at Belen that can be justified on strict economic terms. In fact, the benefits of the project we are authorizing in this bill are estimated to be about 80 percent of the peoject's costs.

Yet, I certainly am convinced—and the officials of Belen are convinced—that this project is critical to the City's future.

Therefore, S. 923 was written in accordance with Section 903(c) of the 1986 Water Resources Development Act. Under that provision, projects that appear uneconomic may still be considered and approved by the Congress if non-Federal interests agree to pay all the costs of the project over and the sum equally the benefits of the project.

S. 923, and the language you have included in Section 201 of the omnibus bill, calls for the standard 25 percent non-Federal cost sharing on that portion of the project's costs that equal the benefits of the project, with non-Federal interests paying the remainder.

Belen is not a wealthy community. But I believe the willingness of the citizens of Belen to bear this added responsibility should demonstrate to the Members of this Subcommittee the absolute validity of the project.

They recognize that dire problems confront their community and they are willing to commit to an expenditure of $7,446,000 toward the full cost of the project: $19,576,000.

Mr. Chairman, let me restate that. The citizens of Belen are willing to contribute 38 percent of the cost of the project, instead of the standard 25 percent.

This is how important this project is to the people and the future of that wonderful community.

I hope this Subcommittee will join me in applauding Belen for this forward-looking commitment, and I hope you will endorse this provision.

Once this project is authorized, I certainly will do everything that I can, as I have said before, to assist the citizens and the officials of Belen obtain financial assistance from other non-Federal sources.

Thank you, and I appreciate your consideration for what I am convinced is a most important and worthwhile project.

Senator **Moynihan**. Well, it is nice to know that that section is finally finding a utility and very appropriate that it should be in Belen. We thank you, Senator.

Senator **Domenici**. Thank you very much, Mr. Chairman. Thank you, Senator Lautenberg.

Senator **Moynihan**. So, with those very pleasant preliminaries concluded, we will now hear our regular testimony. We have as our first panel, someone we could not begin without, Secretary Page. Mr. Page, we welcome you, sir. We welcome General Kelly. And you are accompanied by?

Mr. **Page**. Dr. Ed Dickey.

Senator **Moynihan**. Good morning, Dr. Dickey.

Mr. **Page**. He is now Acting Deputy Assistant Secretary of the Army for Civil Works.

Senator MOYNIHAN. Well, we welcome you particularly on this first occasion. I believe you will appear before the committee in this capacity.

Mr. DICKEY. Thank you very much, Mr. Chairman.

Senator MOYNIHAN. Thank you, Doctor.

Secretary Page, proceed.

STATEMENT OF HON. ROBERT PAGE, ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS, ACCOMPANIED BY G. EDWARD DICKEY, ACTING PRINCIPAL DEPUTY ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS AND MAJOR GENERAL PATRICK J. KELLY, DIRECTOR OF CIVIL WORKS, UNITED STATES ARMY CORPS OF ENGINEERS

Mr. PAGE. Thank you, Mr. Chairman. I will make this brief. I know you have a heavy agenda.

Senator MOYNIHAN. Sure.

Mr. PAGE. I have a detailed statement which I would like to submit for the record.

Senator MOYNIHAN. It will be placed in the record and very happily so.

Mr. PAGE. Thank you, sir.

I am pleased to be here today. It is an opportunity to meet with you again and the committee. I was pleased to hear some of the statements that were made by our distinguished Senators. We are well aware I think of each one of these issues and will be happy to respond to them.

We have reestablished, as you well know, the two-year authorization cycle. The Federal water resources program is working well. Sponsor support is sound on our cost-shared projects. However, I would like to mention at this point that we must continue to instill confidence in our cost-sharing partners in the private sector through what I would think would be a programmed process as we make certain that we are all working in concert not only at the beginning of the process, but come to a reasonable agreement at the end.

An example of what I am getting at, Senator, is that recently we have begun to work much closer with EPA so that disputes can be resolved early on, that misinterpretations can be solved, and that we do not have to go through a torturous period sometimes of 15, 20 years and then have a dispute which we feel is unfortunate and not fair to our cost-sharing partners.

Senator MOYNIHAN. I would just at that point say this committee very much admires the spirit with which you have gone ahead and done that and is very conscious of what you just said about those disputes that go on 15, 20 years.

Mr. PAGE. Yes, sir.

Senator MOYNIHAN. We have reached a point where—well, of the projects we are authorizing today, none will be completed in this century, and some are going to give the next century a long run for its dime. You know, it is about a 30-year cycle.

Mr. PAGE. Yes, sir.

I know that you are well aware—and we have received fine, supporting comments from you and the staff—that it is an agonizing process. We must give some comfort to the people who we work with as partners in the private sector, to assure them that after all this expenditure of time and money, that we will arrive at some conclusion and not come to the very end of these projects and then have them either delayed or stopped by one or two of the agencies that should be involved in the overall process from the beginning. So, we are working hard on that.

Also, when we hear Senator Reid talk about his issue, I would like to say that we have worked in the Corps very hard over the last two years, and I think now it is beginning to bear fruit that the Corps is projecting itself as an environmentally sensitive agency. Through the years, that has not always been the case. I mean, the Corps was perceived not to be environmentally sensitive because its primary mission was to construct flood control projects, such as dams; and when you do those things, sometimes fish and wildlife and wetlands are impacted as part of the overall Federal plan to protect people.

Senator MOYNIHAN. If I can just feel free to interrupt as you go along.

Mr. PAGE. Please.

Senator MOYNIHAN. The Corps has, it seems to me, always been singularly sensitive to an environment which involved people. And if your first concern was to prevent people from being flooded down the Mississippi River or sunk on hidden reefs off New York and so forth, I do not think that was the worst priority.

Mr. PAGE. No, it was not.

We have renewed and increased our commitment to the environment, especially fish and wildlife, and wetlands. And as you know, we have been sensitized to that, and we are working very closely with the necessary agencies. That goes back to my previous statement about how we must work in concert with these various agencies.

Senator MOYNIHAN. Senator Reid, Secretary Page, was speaking of the Truckee project, and they are working with EPA. And, Secretary Page, it has really been remarkable how diplomatic relations have been established. They are more than that. They are now sister agencies.

Mr. PAGE. We think, Senator, as we have said, that serves the Nation better.

Senator, in this very brief statement, I want to say that I personally at the Army have always been proud to state that we have been associated with you in two major efforts. And as I move across the Nation and I talk to people, I can understand that one of the most important things that we have in front of us is to come to grips with the infrastructure program. And we have been extremely pleased in being able to work with you. We consider it one of the most important challenges that we have, and we certainly want to continue to look to you and work with you in the direction of where we must by necessity move.

MAGLEV is also becoming more important. When you first brought it up, I think it was a word that very few people had heard. Now it is on most people's lips. I read the New York Times last week—I believe a Saturday issue—and it was very important, if you saw that. There was a large article written on MAGLEV and what is being done now to try to develop that in the private sector. We certainly look forward to working with you on that issue now and in the future.

We have just received Senate bill 2183, and we will submit the views of the Administration along with the Administration's bill. We have not completed our bill yet. And as I understand, it could possibly be two weeks.

Senator **Moynihan**. Well, that's all right.

Mr. **Page**. We said we would respond to questions. I would be happy to follow up on anything you might want to ask me.

Senator **Moynihan**. Can I just take a moment since you did raise the question of MAGLEV? I happen to be speaking with Mr. Darman yesterday. He came to talk about some other matters, but this came up. I thanked him for seeing to it that the money was in the budget. Senator Reid and I and Senator Graham on this committee are very much involved in this. He noted that it was in the budget two places to ensure that it got through at least one of them. And, of course, it provides funds for the Corps and for the Department of Transportation, the Federal Rail Association, which is good. And we are under way there.

But I also took the occasion of handing him a few pieces of paper. The Japanese are now routinely carrying ads in the International Herald Tribune. It says the new mode of transportation for the 21st century, and it is a picture of MAGLEV. And it says Hitachi will sell it to you.

And the press release, a new consortium in Japan has put together a $3 billion project including what will be the first revenue passenger line. They are going to build a MAGLEV line for commuters. They will buy tickets and get on, and they are going to make money out of the whole exercise. They are there at the production stage of an operating unit. We are still following behind.

When I was a youth, which was many years ago, I was given to understand—and everybody in the neighborhood knew—the Japanese had stolen the plans of an American battleship. And this was a very menacing fact. I grew up and went into the Navy myself, and I found that the plans of an American battleship would fill the Capitol dome, the whole rotunda and dome together. So, I do not think they stole that.

And no one can say they stole the idea of MAGLEV. We just published it, and they had the sense to use it. And we so far are well behind.

Mr. **Page**. Yes.

Senator **Moynihan**. That was really impressive that they are going to an actual revenue structure. I have sent for the document.

Senator **Reid**. Mr. Chairman.

Senator **Moynihan**. Senator Reid.

Senator **Reid**. If you would allow me just to make a comment. I too am grateful that the Administration is including something so that the Corps can begin some work on MAGLEV. But if you compare what has really happened here—and you and I are talking to the choir when we talk to each other. I guess that is about what it amounts to. But to consider Danby and Powell invented this, now we are patting ourselves on the back because we are going to spend

$10 million on the program, whereas in fact the Japanese and the Germans have already spent hundreds of millions of dollars.

Senator MOYNIHAN. Hundreds of millions.

Senator REID. I know that this is the future transportation in our country. But unless something changes rapidly, we are going to be doing it on machinery that is manufactured in Japan or Germany.

Senator MOYNIHAN. That is exactly right. The thrust of the panel of engineers and such that we convened two years ago was that this is coming, and it may come over a 20-year period, but in very short order there is going to be a patent wall around the operating models. And you can have all those you want to buy from Hitachi or whatever.

I was in Germany in December and went out to the field station of the German enterprise. And they have now built their second model. It is as the Boeing 747 is to 707. It is a remarkable thing. It is a huge vehicle. The interior of the first one is about the size of the interior of an amply designed train. The second thing is double-decked and formidable. It will roll along at 240 miles an hour, and you will not hear it or feel it.

I am going to ask a few questions of you on the Passaic River flood tunnel, Mr. Secretary. And I understand that you might not be able to answer them now. You may answer if you like.

I am sure you are aware that there is strong interest in extending the Passaic River basin flood tunnel to Newark Bay. Although that extension was not recommended by the chief's report, it was reviewed and considered as an alternative, was it not?

Mr. PAGE. Yes.

Senator MOYNIHAN. The Corps found the extension was technically feasible. Is that correct?

Mr. PAGE. Yes, sir.

Senator MOYNIHAN. In fact, the Corps' review found that the extension would pose no significant environmental impacts and that it could alleviate up river concerns about possible impacts of the outlet. Is that the case?

Mr. PAGE. Yes, sir.

Senator MOYNIHAN. Although the Corps did not select the tunnel extension, the project with the extension would still be economically justified according to criteria used by the Corps. In other words, its benefit would still exceed its cost. Would that be correct?

Mr. PAGE. That is correct. I think it would be a low benefit ratio I believe at 1.1.

Senator MOYNIHAN. That is 1.1.

Mr. PAGE. Yes. The tunnel extension does meet the cost criteria but it is not in the NED plan.

Senator MOYNIHAN. So, to sum up then—and I am speaking for Senator Lautenberg—the Corps of Engineers did review the tunnel extension and found it to be feasible and environmentally sound. And although the extension would add to the total cost of the project, it would still be economically justified.

Those two points are correct, are they?

Mr. PAGE. That is correct.

Senator MOYNIHAN. Even though there is a lower ratio.

Mr. PAGE. Yes, it is a lower ratio.

Senator **Moynihan**. Well, that is what Senator Lautenberg asked, and I know he will appreciate your testimony.

Let me just note that we just gave you this bill yesterday or last night.

Mr. **Page**. Yes, sir. We just got it, and we have not had a chance to go through it.

Senator **Moynihan**. I do not think you will find any problems here.

I would call attention, as you will not need to have attention called, to section 3 which is some general provisions about, again, how we go about managing our water program. Mr. Weiss has taken a particular interest in them up here.

Mr. Weiss, you have worked with the Corps in doing this, have you not?

Mr. **Weiss**. We have had sessions with them, yes.

Senator **Moynihan**. I think this reflects what you would like to have.

Mr. **Page**. Yes.

Senator **Moynihan**. And if it does not, you tell us because we are not trying to restrict your activity.

Mr. **Page**. We will. Thank you, Senator. We do appreciate this.

Senator **Moynihan**. Take a good look at them, and if you think they ought to be changed, tell us how. We are here to help this project along.

The thing I want to leave you with is that we are coming out of a phase in the Corps' history where all the obviously desirable projects had been done, the urgent projects had been done. You had tamed the Mississippi, Missouri, Ohio. You had dug the harbors and put up the dams. And then you began to get to more marginal projects. And then from laterally some series of concerns, which we will call environmental, if you like, but I do not know why getting the Mississippi River to stop flooding was not environmental as well. The whole history of mankind begins with regulating the flood waters of the Nile or a chunk of the history. And then there was a slowing down.

And what we want is a speeding up in some new areas of activities, but it is not like us to take 30 years to build a project. We do things in decades at minimum. And I would hope that you try to get into a style that anything that is going to take more than 10 years, let the next chief of engineers do it. We do things in this decade.

I see General Kelly nodding. This has to be done as if this is something we wanted to do, not something that we kind of got into a routine of saying, oh, well, yes, all right, some day, I guess. That is not the Corps of Engineers that has changed this continent and won wars all over the globe. Right?

Mr. **Page**. Yes, sir.

Senator **Moynihan**. Senator Reid.

Senator **Reid**. Amen.

Senator **Moynihan**. Amen. Well, there you are.

Mr. **Page**. We will say amen with you. We have taken a look at historically all of the times that it takes to approve projects the present ones being considered, and we have done every possible thing we could to streamline the approval sequences, to shorten them, because time is money.

Senator MOYNIHAN. Sure. Time is perspective too. Time is a sense of something happening.

Mr. PAGE. Yes.

Senator MOYNIHAN. Thirty years is too long.

Mr. PAGE. The project no longer probably is needed.

Senator MOYNIHAN. You have forgotten you were doing it. You look up and say who did that to the Passaic River.

Well, again, thank you.

General Kelly, we would like to congratulate you on your majority.

General KELLY. Thank you, sir.

Senator MOYNIHAN. And Dr. Dickey, we welcome you to the Corps and look forward to working with you. And thank you, Mr. Secretary.

Mr. PAGE. Thank you, Mr. Chairman.

Senator MOYNIHAN. And so, let's consider ourselves under way, and let's move with some dispatch. We will hear from you.

Mr. PAGE. Yes, sir.

Senator MOYNIHAN. We are now going to have a second panel consisting of Mr. Thomas Jorling, Commissioner of the New York State Department of Environmental Conservation; Lillian Liburdi, who is the Director of the Port Department of the Port Authority of New York; Mr. Erik Stromberg, who is the President of the American Association of Port Authorities; and the Honorable Gilbert Garcia, who is the Mayor Pro Tem of Belen, New Mexico.

Is Mayor Garcia here? Yes. Mr. Mayor, would you come forward? If you would like to bring an aide with you, by all means do. And perhaps you would introduce your aide.

Mr. GARCIA. Yes. Thank you, Senator. This is Rudy Sachs, a fellow city councilor in Belen, New Mexico.

Senator MOYNIHAN. Mr. Sachs, we welcome you to the committee.

Mr. SACHS. Thank you, Senator.

Senator MOYNIHAN. We follow our somewhat inexplicable, but serviceable pattern of hearing witnesses as they appear on the witness list. And so, the first is Tom Jorling, formerly a member of the staff of this committee, whom we welcome back.

STATEMENT OF HON. THOMAS C. JORLING, COMMISSIONER, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Mr. JORLING. Thank you, Mr. Chairman. It is a pleasure to be back here in this more familiar hearing room than the modern ones over in the next building.

I have prepared testimony which I would like to——

Senator MOYNIHAN. We will put all testimony in the record.

Mr. JORLING. I would just touch on a very few points because I know the time is short.

The first point, Mr. Chairman, one near and dear to your heart and one that you have exerted great leadership on, is the inclusion in the water resources bill of section 206 on the Onondaga Lake

Management Conference. You have been pushing, in light of your previous comments with the Corps, on all fronts to achieve an objective which is now widely shared, that is, the restoration of an important body of water adjacent to the City of Syracuse. The inclusion of that authority here, coupled with your appropriation of $500,000 and your convening of the actual conference in Syracuse in which I accompanied Governor Cuomo, is a good omen. And I would only note in passing that at that conference there was an underlying theme that was widely shared, and that was one of optimism that we can, in fact, do this job. And this authority will help in that endeavor.

And basically our task is to bring the multiple authorities of Federal agencies, state agencies to bear on a single goal—to repair and remediate Onondaga Lake.

The second point that I would like to touch on is the infrastructure council bill which you and a majority of the Committee are sponsoring. I think you have identified how financing infrastructure maintenance and construction will be the task of the next century.

We have made some inroads on financing infrastructure for waste treatment. The State of New York has now put together the state revolving fund necessary under the Clean Water Act, and if the Federal appropriations are as you have directed in the Clean Water Act, we will have a $1,100,000,000 fund in New York to leverage $4 billion worth of construction, in the next decade and beyond, much greater amounts, a very vital thing.

But there are other needs, and those needs extend to water supply. They extend to solid waste management as well, and the whole issue of infrastructure finance I think needs to be addressed. The infrastructure council will move in that direction.

I would just touch on a couple of the experiences we have had in the State of New York with the Corps under the 1986 and 1988 water resources acts. Those acts clearly gave the states a more prominent role in two areas: one, the planning/decision making process; and secondly, the financing, paying a share of the cost of these projects.

Our experience in New York is that the second is working, we are paying but the first is not. That is, our partnership involvement in planning and decision making is still I think subordinate and not treated seriously by the Corps, and that is something that I think the committee should address.

Now then, I will just touch on one of numerous specific comments in the testimony. That is, the harbor drift project. The harbor drift project which involves New York Harbor, the Port Authority, the State of New Jersey, the State of New York has been very successful. It is in danger, however, of coming to a halt. The consequences will be an increasingly dirty harbor with both threats to navigation as well as aesthetic unpleasantness and the perpetuation of these derelict piers and other debris that surround many of the shorelines in the harbor.

The reason I bring this project to your attention is that the Corps is taking a position that each new reach of shoreline for the project is to be considered a new project. That, in effect, puts it at the bottom of the line. New projects are in time of scarce resources hard to justify. Yet, this is a project that has been authorized continuously over a long period of time. It is a successful one, and I think it is important in times of scarce resources to continue successful programs, not to abandon them in preference for some——

Senator MOYNIHAN. Help me now here. This is in the range of an administrative decision within the Corps. I see Ms. Liburdi is agreeing.

Mr. JORLING. That is correct, Senator.

Senator MOYNIHAN. And so, what would you want us to do? We will have another hearing on this subject shortly when we get back comments from the Corps. April 10 is blocked out.

Well, go ahead.

Mr. JORLING. I think our position—and I think it is shared by the State of New Jersey and the Port Authority—is that the Corps should reverse its administrative decision. They are basing it on an interpretation, as I understand it, of section 34 of the 1988 act. We do not think that interpretation is a correct one, but I think it is of sufficient importance——

Senator MOYNIHAN. Well, all right. Give us this in writing, and we will take it up with them in writing. We will ask if they want the law changed.

Mr. JORLING. We will do that.

I would be happy to respond to any other questions you have, but now I have completed my formal testimony.

Senator MOYNIHAN. All right. Let me just go through the panel. I think Ms. Liburdi is next. So, why don't you tell us what you have in mind and then comment on this as well?

STATEMENT OF LILLIAN C. LIBURDI, DIRECTOR, PORT DEPARTMENT, PORT AUTHORITY OF NEW YORK AND NEW JERSEY

Ms. LIBURDI. Thank you, Mr. Chairman. I am pleased and grateful on behalf of the Port Authority to be able to present testimony before you today. And, Mr. Chairman, I am most pleased to note that the proposed water resources bill, the second since the historic Water Resources Development Act of 1986, maintains this two-year schedule for authorization of the Corps of Engineers civil works program. I commend you and the committee for taking this action to assure that our critical water development programs are going to continue uninterrupted, and I guess that is my basic theme, that we continue uninterrupted and accomplish, as you suggested to Secretary Page, in our life cycles what we hope to achieve.

I wish to offer a few comments based on our experience with the 1986 and 1988 acts. We hope that those suggestions will help us truly to be, as Mr. Jorling said, a full partner with the Federal Government because I underscore what he said. We are a full partner on the cost side at this point, but I do not believe we are in the planning or implementation side yet. And if some of our suggestions are considered and accepted by the committee, we think they will lead to a fairer and more efficient economic partnership.

Now, there are a few areas that I would like to specifically comment on, although I do have longer testimony, which I thank you for accepting this morning.

The first is dredged material disposal. It is a vexing matter that concerns many of us and, of course, many ports around the country. The Corps has regulatory responsibility for disposal of all dredged material activities that occur within U.S. waters.

For the Corps to fulfill its mission and responsibility for harbor navigation, disposal of dredged material we believe must be considered an integral part of that mission. The disposal of material from Federal channel bottoms as a result of channel improvements or maintenance is clearly a national concern. In the case of our port, New York and New Jersey, approximately 65 percent of the total material dredged results from the Federal channel maintenance program. Disposal, therefore, in our view should not be regarded solely as a local port responsibility, particularly as dredged material disposal management becomes a more difficult challenge facing every level of government. And, Mr. Chairman, I must tell you it is becoming much more difficult not only in our port, but across the country.

I have to note that the bill you are considering today is moving forward at the same time Congress is also considering coastal protection legislation which, while having many worthwhile features, could greatly complicate responsible dredged material disposal strategies in our ports. So, I hope that some consideration and coordination among the proposals is taking place and that we can contribute to——

Senator **Moynihan**. Well, don't hope any such thing. Let's see if we cannot get this clear before this bill goes forward.

Do we know about this, Mike? Well, if Mr. Weiss does not know what you are talking about, this committee does not know what you are talking about.

Ms. **Liburdi**. This is legislation Senator Mitchell is sponsoring, and we would be delighted to speak with Mr. Weiss specifically about the concerns that we have.

I would also like to indicate that in the 1986 act, you adopted the concept of non-Federal cost-sharing for all channel improvement projects and user fees to cover cost of maintaining Federal channels. And while some of the costs of navigation projects were consciously, after debate and discussion, made a local responsibility, the Federal Government has chosen to shun responsibility for certain disposal methods. And by that I mean containment facilities and others that require site preparation. That is a concern to us.

We believe that navigation projects are Federal projects with a clear Federal responsibility and providing a clear national benefit. And we believe that the ultimate management of dredged material and its attendant costs, if they are not incorporated into Federal responsibility, lack some logic in that regard. And we hope that you will explore this issue as you are moving forward with this legislation.

We urge that the cost of disposal of dredged material from a Federal navigation project with national trade policy and economic benefits be a Federal responsibility, and if not, certainly that we explore the relationship between Federal and local partners in this matter.

Senator **Moynihan**. Oh, my God. Half the legislative reach of the Federal Government begins on the Supreme Court decisions having to do with the steamboat navigation on the Hudson River, after all, in 1814 or 1816, as I recall. And if we have not straightened that out yet, I do not know what we will do when.

But I just have to ask you and I think Mr. Jorling and maybe your counterpart in New Jersey to come and sit down with our staff and tell us what you want and we will see if we cannot get it.

Ms. LIBURDI. We would be delighted.

Mr. Chairman, just two other points.

Senator MOYNIHAN. Sure. I know what is coming.

Ms. LIBURDI. We face an immediate need in our port for a long-term dredged material disposal strategy. The Corps is about to issue a major report on disposal options which is the product of nearly eight years of study and effort. Some of the options could be implemented almost immediately, but none are without some environmental consequence and all have opponents and proponents.

So, to set out a workable and economically practical strategy, we believe we will require political will, the full participation of the Federal Government and the cooperation of all of the interested parties. And I hope that we can look to you and this subcommittee for guidance and assistance perhaps, as you have just offered, in resolving this question of dredged material disposal on a national, as well as local basis.

On the subject that Mr. Jorling raised, Mr. Chairman, we want to thank you for your past support for the New York Harbor collection and removal drift project. I want to underscore what Mr. Jorling said, but I would like to add one other point.

Last year Congress appropriated $1.9 million for this fiscal year to continue the harbor drift project. Yet, we have been advised by the Corps that of that appropriation, only a work allowance of $100,000 will be spent for the purpose of conducting a new economic analysis of the project, as Mr. Jorling said, to lead to the reevaluation of each of the reaches of economic benefit.

Senator MOYNIHAN. Yes.

Ms. LIBURDI. We are most concerned about that because of the threat to safety and navigation that the drift in the harbor leads to and, of course, to the extreme likelihood that if the drift is not removed, it will wind up on our beaches in New York and New Jersey. And that is not anything any of us wishes to see happen.

Mr. Chairman, in the full statement I have touched on a number of other areas, including the need to correct non-Federal sponsor payments which cause us to lose interest on public money, which we hope you will take a look at, on local user fee authority, on the Corps single beneficiary policy and its benefits of navigation projects to the armed services.

Finally, Mr. Chairman, I would like to briefly comment on the Administration's proposed increase in the Harbor Maintenance Act. I cannot say we were surprised by the proposal. However, I will say that for a tripling of the present fee, the Administration proposes absolutely no additional benefit to ports or port users. And to my mind, that is very difficult to justify, and we would certainly like to have a discussion when the opportunity presents itself to forward this issue.

Senator MOYNIHAN. Yes. We will have to look at that ourselves.

Let's go through our witness list. Mr. Stromberg, you probably have some views on that subject yourself.

STATEMENT OF R. ERIK STROMBERG, PRESIDENT, AMERICAN ASSOCIATION OF PORT AUTHORITIES

Mr. STROMBERG. We do, sir, and I appreciate the opportunity to appear here before you this morning.

The American Association of Port Authorities represents virtually every public port agency in the United States. Our members are public entities which often serve as the local sponsors for channel navigation projects.

Given the testimony of Mr. Jorling and Mrs. Liburdi, I may serve to corroborate many of the points that they have made from the national perspective.

First, we would commend you for introducing Senate bill 2183. We continue to appreciate the work of this committee in moving forward water resources legislation and particularly the hard work that led to the passage of the landmark 1986 act and the follow-up 1988 authorization bill.

We now hope that we are firmly back on a two-year cycle, and as such the 1990 bill takes on added significance. In fact, if I leave you with one message today, sir, it is that we do need a regular two-year authorization cycle. When ports meet the cost-share market test, as you and Senator Domenici referred to earlier, when we gain the support of the local community and environmental resource agencies for our projects, in other words, when we have done our job, we are depending upon Congress to set an authorization timetable on a regular basis.

We support, even encourage modest legislation, as you referred to earlier. With many of the long, overdue projects achieved in the 1986 and 1988 acts, there still are some urgent projects out there. There may be a far fewer number, but the urgency is still great to those local port communities, to states and to the Nation as a whole.

We have now three years of experience with the Act, and there are several changes that we are recommending. Those are described more fully in the testimony that I appreciate you inserting in the record.

Senator MOYNIHAN. Yes.

Mr. STROMBERG. We have in general the objective to be full partners, and here again the "partnership" word is invoked. I do not think we originated it. I think it was a Corps word, but as such we must use it and hope to achieve its implementation to be full partners.

I must say to date that our relationship with the Corps to date has not been totally satisfactory. It has been trying. It has been frustrating on almost every project that we have worked through. Our lack of involvement in planning, the decisionmaking, the information sharing that has been referred to continue to present problems to our port agencies.

We have the incentive through cost-sharing and the expertise to play our intended role in increasing the efficiencies in moving forward with channel navigation projects.

A couple of the issues that I would like to highlight. And again, Ms. Liburdi has indicated our first and foremost issue, which is the issue of dredged material disposal and the allocation of those costs in particular.

The disposal of dredged material is often the most difficult problem associated with a harbor channel project. Yet, its resolution is often the most critical to the project's success. When the Corps of Engineers studies the best placement option for dredged material in concert with a host of environmental and natural resource agencies, all alternatives, including various land and water disposal alternatives, are considered equally in the analysis. However, all disposal alternatives are not cost-shared equally.

The disposal of dredged material from Federal channel bottoms is clearly a vital part of the channel project, and we recommend that the cost of constructing confined disposal facilities should be part of the total project cost and cost-shared according to the act. It is currently offset against the 10 percent repayment requirement.

Second, I would like to mention one component of the 1986 act that was intended to speed up the process, and those lie in sections 204 and 205, which allowed a local sponsor to construct a plan, and then construct a project, and then seek reimbursement for that authorized project from Congress. We believe that the provisions that have implemented 204 and 205 are overly restrictive with respect to the Corps oversight of the process, and we find now a great deal of confusion surrounds the roles and responsibilities of the non-Federal sponsor.

While we will not recommend at this point specific amendments, we have some problems concerning navigation servitude, and we also have some problems with the permitting process in terms of its redundancy. Once we go through the Environmental Protection Act procedures, there is a redundancy in the permitting procedures. We would be more than willing to work with this committee to make section 204 work for the ports, as well as for the national interest, in moving forward with these projects.

I will only refer to our testimony with regard to the issues of navigation servitude and utility relocations.

Senator MOYNIHAN. Yes.

Mr. STROMBERG. I would finally like to, in terms of a specific provision, indicate our strong support for section 306 of S. 2183 dealing with the cost-sharing reductions for the military benefits of projects where they can be well documented.

Again, we appreciate your introducing this most important legislation and your leadership in the water resources program, as well as your concerns for our infrastructure, which are of great concern to the public port industry. We look forward to working with this committee in assuring the 1990 bill moves through towards enactment. Thank you very much, sir.

Senator MOYNIHAN. Thank you, sir.

Mr. Mayor, if you will be so gracious as to let me just deal with this collective group of issues here and then we will settle down to the City of Belen.

Just a general point. We are not in any rush to legislate. We want this bill done. We want to do it and we have to get it through the Congress in time.

I think we have to sit down with you all.

The Corps will be back in about two weeks with its comments. The Corps should not have many comments to make. We are proposing measures that they have said should be done.

Mr. **Weiss**. There are some things they will object to. I think the Secretary is being a little optimistic when he said he would approve all of those provisions.

Senator **Moynihan**. Well, all right. But in two weeks we should hear. We should have that.

And so, we ought to hear from the threesome here about the specifics on the question of the fees. We will get to the fees in another context.

We ought to be good at these things now, you know, working together, but I don't know. The Corps will want to see it and we will want to see it done.

Our worry is that if our legislation gets more elegant—I am glad to know you have problems of drift in the Hudson River and the harbor, but the only thing they threaten are the beaches which will survive. They do not threaten navigation because there isn't any. How did we kill it all?

Ms. **Liburdi**. Excuse me, Mr. Chairman. That is not quite accurate. We have not killed our navigation.

Senator **Moynihan**. You are absolutely right. I was flying into New York the other day, and I saw a ship in the harbor.

Ms. **Liburdi**. You see more than one ship, Mr. Chairman. We have done very well this year. Our tonnage has gone up significantly in 1989, but we may have fewer ships overall because they have grown in size, as you know, as a result of the changing economics of the port industry and the marine cargo movements that are taking place worldwide.

But the Port of New York and New Jersey has done much better in this last year as a result, if I may say, sir, of the cooperation between management of the steamship lines, the port community generally and labor in our port. So, we are doing better. And I think nationally it is growing.

Senator **Moynihan**. I would love to see the data because quite seriously I was raised on those piers. And to see a ship in New York Harbor when flying in on the shuttle is exciting. Say, look, there's a ship. If I had grandchildren, I would want to point it out.

Ms. **Liburdi**. Mr. Chairman, I would be happy to submit data. We had 5,000 ship calls last year.

Senator **Moynihan**. You have an awful lot in the container ports in New Jersey. That is where you are doing your work.

Ms. **Liburdi**. But also in Brooklyn which has done extremely well, and we are growing in our traffic at Staten Island.

Senator **Moynihan**. In Brooklyn?

Ms. **Liburdi**. Yes, sir.

Senator **Moynihan**. The ILA is down to about 1,500 members. Right?

Ms. **Liburdi**. In Brooklyn? Overall in the port it is about 4,500 members.

Senator **Moynihan**. It was 45,000 when I was a kid.

Well, how did we kill our port?

Ms. **Liburdi**. We went to container operations and reduced the amount of longshore labor as a result of that.

Senator **Moynihan**. That wasn't, in fact, the most interesting way to spend your life in the hold of one of those old tramp steamers.

Ms. **Liburdi**. Also we have had competition from many other ports who have invested as regional economic development opportunities emerged up and down the north Atlantic coast.

Senator **Moynihan**. It is a pretty empty harbor, though. It was the greatest natural harbor in the world. That did not happen on your watch, Ms. Liburdi, but what one worries about is that once half of the revenues for the Federal Government came from tariffs collected in the Port of New York when they had that custom house there.

Ms. **Liburdi**. Mr. Chairman, I would like to say that from what we saw as recent 1989 data from Commissioner Hellet we still are, as you look at the Port of New York and New Jersey, both the airports and the seaports, the single largest collection of revenue source for the country.

Senator **Moynihan**. I am not surprised.

You talk about driftwood. The first thing that happened to me when I came to the Senate, Senator Javitz and I were asked down by President Ford's Secretary of Transportation, and we were presented a model of the westway. And he said most graciously it is yours, one of the great public works projects of the age. It would have been to New York City what the development of Central Park had been in the 19th century. They got the waterfront back, got the river back after having lost it to the—well, the Hudson really—to the steamboats and the railroad. You'd get your river back and the Federal Government would pay for all of it and everything.

And New York couldn't do it. New York did not have the capacity to do it. It killed it. We killed it. We could not design it in a way that could get by a Federal court. And so, it will sit there. Those piers—I used to work on those piers—will molder there. You will be an old person and they will still be moldering there. We have not got institutional capacity to do anything about it.

It is called entropy. It means a civilization that is dying, a system that is dying. The energy is going out and it is turning cold.

Ms. **Liburdi**. Mr. Chairman, I had the opportunity to participate as a result of an appointment by Governor Cuomo and Mayor Koch on the westway task force to——

Senator **Moynihan**. Another westway council.

Ms. **Liburdi**. And I have hope. I have optimism that we will find a solution both for a highway and a public esplanade and a walkway and uses along that waterfront.

Senator **Moynihan**. I have no hope at all.

Mr. **Jorling**. Mr. Chairman, if I could add to that just to add the latest chapter.

Senator **Moynihan**. It is just the latest chapter, not the last.

Mr. **Jorling**. The latest chapter is the governor has included $100 million in the 21st Century Environmental Bond Act——

Senator **Moynihan**. Nothing will happen. Nothing will happen.

Mr. **Jorling** [continuing]. For the esplanade, and the City of New York has committed an additional $100 million for public access in that stretch. So, I think for the first time most of the interests that have been affected by that project are in agreement that there is now momentum behind it. And in the end, we will have a——

Senator **Moynihan**. Not in this century.

Mr. **Jorling** [continuing] West side which we will be as proud of—of this generation's contribution as we are of the previous contribution on Central Park.

Senator **Moynihan**. I doubt it.

We have a great situation. There is a wonderful fish that has been in the Hudson River for as long as the Hudson River was there called the striped bass. The effort to build this park, extend the west side of Manhattan on the Hudson River, ultimately fell afoul of an idiot decision by a Federal judge badly argued by the State of New York, incompetently argued by the City of New York, that the removal of the piers, these wooden piers driven about 1870, would interfere with the breeding and spawning of the striped bass. Where they spawned before 1870 is a mystery, although I would suggest that they did manage to spawn. So, we could not build the westway, just thoroughly incompetent advocacy on our part.

And so now the striped bass can spawn, and then they move upstream where they grow. But when you get up stream, you cannot catch them and eat them because coming downstream, the river is polluted with PCBs, which were dumped there by the General Electric Company up at Fort Edward, way up.

And this committee provided money to get the PCBs out of the Hudson in 1979, and we are now two decades gone, aren't we? But we cannot dredge up the PCBs because we cannot find an acre of land to put it on. And so, you cannot build the westway because it interferes with the spawning of the fish which you cannot catch because of the PCBs coming down which you can't dredge because of—that is called entropy. It is called a dying system.

And you really are hopeful. Well, good, because you should be. You are of an age to be. I am of an age to be very much unimpressed.

But we thank you, and we want to hear what you want us to do in this bill. And you were very thoughtful to come. Mr. Stromberg, you consider yourself part of this matter. But let's get going. If you look outside, you see the color of the sunlight. The flowers are out. The forsythia is out. In no time at all it is going to be election season around here, and we better get a bill passed.

Mr. **Stromberg**. Mr. Chairman, one point that was raised in conjunction with your discussion with Mr. Weiss on the coastal resources protection legislation.

Senator **Moynihan**. Yes.

Mr. **Stromberg**. We have been working very hard on that with another subcommittee within this committee, and we would encourage as much as is prudent and appropriate the communication and cooperation and work at the staff level on that legislation because, as Ms. Liburdi says, it does greatly affect our ability to continue to dredge and deal with the dredged material disposal issue.

Senator **Moynihan**. Sure.

Mr. **Stromberg**. If we could respectfully suggest——

Senator **Moynihan**. You don't have to do it so respectfully. Just suggest. Yes, let's do that. Okay.

Thank you for being here.

Now, Your Honor, you have waited patiently having been lavishly introduced by your Senator, and we welcome you here. Tell us about the flooding in Belen.

STATEMENT OF HON. GILBERT GARCIA, MAYOR PRO TEM, BELEN, NM

Mayor **Garcia**. Thank you, Mr. Chairman.

It is, indeed, an honor for a couple of reasons to be before you this morning. One of them is we have seen you on national TV so much, we can say that you have been in our living rooms certainly not physically, but an image. And being both a politician and an avid fisherman, it gives me the right to stretch the truth a little bit.

Also, Mr. Chairman, as a political science student at UNM, I remember a lot of your writings that helped me understand the political system and the way government works. I was sitting in the back here trying to remember which ones in particular, but unfortunately your writings helped me understand government and did nothing for my memory.

Senator **Moynihan**. I have to tell you, Mr. Mayor, your memory was fine, but memory does not get better. Judgment does. And they haven't got a memory pill. Let me tell you. The synapses go every day.

Mayor **Garcia**. We can keep hoping here.

Mr. Chairman, I would like to thank you for including the contents of Senate Bill 923 in your bill, 2183, section 201 of it.

We are desperate in Belen for this flood control protection.

We are especially grateful to Senators Domenici and Bingaman for taking the lead and sponsoring this particular bill.

We have a reoccurring situation in Belen that has, unfortunately, caused a lot of property owners and a lot of individuals to lose faith in the ability of downtown Belen to withstand repeated floods. And there is a lot of growth in our area, but unfortunately our beautiful city is growing much like a donut with a center being just as empty as a donut is.

Senator **Moynihan**. We have seen that. Yes.

Mayor **Garcia**. It has led to many vacant lots, loss of interest, stagnation and decay. And that is real unfortunate because our little community was first settled in 1740 by a group of 40 families under a land grant from the king of Spain, and it was an open land grant. It was not limited to that particular group of families, but because it was an open land grant, many individuals chose to partake of that. And so, the area grew rather rapidly.

In 1850 there was a major flood coming from the Rio Grande Valley that absolutely devastated Belen, just wiped Belen out completely. And so, Belen was reconstructed a little further upstream. But we are finding out now that when we did that 100 years ago, we did not go out of the valley enough, and we are still experiencing problems.

The City of Belen is located 32 miles south of Albuquerque in the Rio Grande Valley. The soil conditions are rather unique in that they range from loamy soil to expanding clay, the type of clay that they use to line lakes and manmade reservoirs to keep water from seeping down. There is a lot of gravel involved as well. They are highly erosive soils.

I assume that you have our prepared statement. Were you given a copy of it?

Senator MOYNIHAN. Yes, I do, and it will be put in the record.

Mayor GARCIA. On page 2, I would like to call your attention to a diagram showing a cross section of the valley with the City of Belen being on the extreme right. Notice the two canals that are there right at the base of the alluvial slope and the scarp.

In a nutshell, the problem is we do not have a lot of rain in Belen. My children have seen rain twice. No, it is not quite that bad. We have a total of eight inches of annual precipitation. Unfortunately, at least four inches of that occurs in late spring, summer and early fall. And we have had as much as three inches of rain in one 30-minute period.

A lot of the water that falls on top of the mesa starts coming down the scarp and the alluvial slope picking up velocity as gravity tends to work. And it picks up silt and gravel and a variety of soil. The first opportunity it has to slow down, it starts to deposit this silt that it has picked up. And unfortunately, that is the Highline Canal which is diverted Rio Grande water. So, it fills the canal with——

Senator MOYNIHAN. That is basically an irrigation canal.

Mayor GARCIA. That is correct. Yes. Thank you. It is an irrigation canal.

It fills that canal with silt, and so now we have the rest of the flood water and also the irrigation canal emptying into town. Our major threat has been the fact that even from the time they cut off the supply to the irrigation canal, which is some 13 miles north of Belen, the water continues to flow for 12 to 14 hours. So, if you have a little break, it becomes a major break because of the water flow.

In the last 20 years, the water supply lines in two different locations in Belen have been unearthed three times, which mixes drinking water with flood water, and so you have to keep folks from consuming it, and you have to flush the lines. It is quite a task. It has been a real severe problem for us.

Our most recent flood of major significance was in 1980, but the most devastating was in 1969.

The problem is, of course, the fact that the math doesn't work. It was alluded to a little bit earlier. You need to have a cost-benefit ratio of 1, and we are at .83. So, we have agreed to pick up the remainder of that.

One very important thing that is not mentioned in the document that you have before you is that the silt and gravel and various deposits that are placed in the Highline Canal is a major problem for the Rio Grande Valley. The Bureau of Reclamation is very concerned that Elephant Butte Dam, located approximately 100 miles south, is filling up extremely rapidly because of the erosive soils.

Senator MOYNIHAN. I did not get that name.

Mayor GARCIA. It is Elephant Butte.

Senator MOYNIHAN. Elephant Butte?

Mayor GARCIA. Elephant Butte Dam. It is the largest body of water in New Mexico. It is about 40 miles long and ranges from three-quarters of a mile to five miles wide. Excellent bass fishing, including some stripers that you spoke about earlier.

So, the Corps of Engineers estimates that 4.9 acre feet per mile of silt is displaced every year on an annual basis. That is a tremendous amount of silt. Part of the settling basins that would be attached to this project would be desilting basins so that the silt could then be removed and disposed or relocated in a manner that is not going to be a problem to us. But the whole issue of silt and soil erosion costs every many, woman and child a tremendous amount of money in the United States. It is a big problem, and in our area it is particularly a big problem.

We have a lot of folks who have offered letters of support.

Senator MOYNIHAN. We see these, and they will part of the record, of course.

Mayor GARCIA. Okay. We have not asked for any of them, but Valencia County; Middle Rio Grande Conservancy District; Highway and Transportation Department; Valencia County Economic Development Corporation; Department of the Army, Corps of Engineers; Middle Rio Grande Council of Governments. Valencia Soil Conservation Service will be sending one. And there are several other people that did not send a letter, but indicated strong support, like the National Guard who has been out there to help us on numerous occasions.

Senator MOYNIHAN. I'll bet.

Mayor GARCIA. The City of Albuquerque, Bureau of Reclamation. It is something that is desperately needed, and we ask that you support it with all your ability.

Senator MOYNIHAN. All right, sir. We will take this into very careful consideration.

It is particularly important that you have come not all this way—I mean, whatever the distance to Washington is. It ought to be the same for every mayor in the sense that you are all equally part of this country and not just Alexandria and Baltimore and Richmond.

We will have to ask the Corps about it. We have made provision for this kind of arrangement in the Corps. My understanding is that you are willing to pick up the difference to equalize a .83 cost-benefit ratio.

Mayor GARCIA. That is correct.

Senator MOYNIHAN. All right. That impresses me. I will have to see what my colleagues think, of course, and what the Corps thinks.

Mr. Sachs.

Mr. SACHS. Mr. Chairman, I just would like to say that I appreciate all of the time that you have given to this matter. And I would also like to just stress the importance and the need that we have for our citizens down there in our town. And anything you can do will be greatly appreciated. Thank you.

Senator MOYNIHAN. Surely.

Let me thank you for that block diagram. It helps a lot. I see what is going on there, and we don't otherwise.

Very well. Six inches of rain a year all in a half an hour.

Mayor **Garcia**. Eight inches a year, four in a half an hour. Chicken or feathers.

Senator **Moynihan**. The king of Spain did not give away anything for nothing.

Thank you very much, Mr. Mayor. Thank you, councelor.

And with that, our hearing is concluded this morning.

[Whereupon, at 10:30 a.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

[Statements submitted for the record, responses to additional questions, and the bill S. 2183 follow:]

PHIL GRAMM
TEXAS

United States Senate
WASHINGTON, D. C. 20510

Statement of Senator Phil Gramm
before the Committee on Environment and Public Works
Subcommittee on Water Resources, Transportation and Infrastructure

March 1, 1990

Mr. Chairman, I am pleased to submit this statement in support of S. 2183, to provide for the conservation and development of water and related resources, to authorize the U.S. Army Corps of Engineers Civil Works Program to construct various projects for improvements to the Nation's infrastructure, and for other purposes.

Included in S. 2183 is authorization for the Corps of Engineers to construct comprehensive flood control improvements on Buffalo Bayou in Harris and Fort Bend Counties. The Buffalo Bayou watershed covers 1,034 square miles, of which much is located in the Houston metropolitan area on Brays, Carpenters, Greens, Halls, Hunting and Little White Oak Bayous. When this project is completed, the Corps estimates that it will reduce flooding by as much as 90% and remove over 70% of the acreage within the six bayous that is located in the 100 year floodplain.

Unless corrective measures are taken, annual flood damage of $204 million will occur and increase to $340 million per year by the year 2045, according to the Corps' feasibility study. Therefore, it is imperative that measures are taken to protect Houstonians from this threat.

The Corps has undertaken numerous other flood control measures in Houston, including the Addicks and Barker Reservoirs as well as channel improvements on Buffalo, Brays, White Oak, Vince and Little Vince Bayous. However, additional work is needed to protect the lives and property of the nearly 2 million people who live in Houston, the Nation's fourth largest city. As you know, reduction of urban flood damage is one of the top priorities of the Corps of Engineers.

Additionally, the Buffalo Bayou project will permit the constuction of $8 million of recreational improvements. These facilities will include hiking trails, picnic areas, pavilions, boat launching ramps, playgrounds, restrooms and parking facilities, which will be located within the project's boundaries.

The importance of this long-term project is demonstrated by the strong commitment of financial resources by the project's local sponsor, the Harris County Flood Control District.

Therefore, Mr. Chairman, in view of these factors, I urge the Committee to act swiftly in approving this bill and report it favorably to the full Senate.

STATEMENT BY THE HONORABLE JACK FIELDS (R.-TEXAS) SUBMITTED TO THE SENATE ENVIRONMENT AND PUBLIC WORKS SUBCOMMITTEE ON WATER RESOURCES FOR ITS HEARING ON S. 2183, THE WATER RESOURCES DEVELOPMENT ACT OF 1990, MARCH 1, 1990

Mr. Chairman, I would like to thank you for allowing me to submit this statement in strong support of the Army Corps of Engineers' proposal to widen and deepen the Houston Ship Channel.

It has been 23 years since this committee authorized the Galveston Bay Navigation Study. During that time, the Corps of Engineers has spent millions of dollars evaluating every potential environmental impact of this project.

While these studies will continue, it is time to move this project forward. I would urge you to incorporate this critical navigation improvement project within the Omnibus Water Resources Development bill.

Mr. Chairman, the city of Houston has experienced severe and prolonged economic difficulties in recent years. During that time, the Port of Houston has been one of our city's few bright success stories.

The Port of Houston is now our nation's third-largest port and the largest in foreign trade. More than 4,750 ships call at our Port each year and over 150 companies have invested more than $15 billion along its shores.

It has been estimated that one in every three dollars in the Houston economy can be directly attributed to the Ship Channel. In 1989, the port produced jobs for more than 28,000 Houstonians. In addition, it provides financial benefits to some 160,000 people throughout Texas and it generates an average of $3 billion in positive economic impacts each year.

According to a recent study, dredging the Ship Channel to 45 feet would create or retain 9,000 jobs in Houston and an additional $2.5 billion would be injected into our economy by the year 2025.

It is these jobs and the other economic benefits that these improvements will provide that has led individuals and groups as diverse as the Governor of Texas, the Mayor of Houston, the Harris County Board of Commissioners, the Houston Chamber of Commerce, the Greater Houston Partnership, the Houston Economic Development Council, the Houston World Trade Association, the International Longshoremen's Association, the Houston Pilots Association, the city's two major newspapers -- the Post and the Chronicle -- and, most importantly, the people of Houston to enthusiastically support this project.

On November 7, 1989, the citizens of Houston -- by an overwhelming majority -- voted to approve a $130 million bond issue to help pay the local share of deepening the channel to 45 feet and widening it to 530 feet. This bond issue was widely publicized and it is a critical reason why I am supporting this project.

Mr. Chairman, the citizens of Houston have spoken. It is time for the United States Congress to authorize this project and allow the Houston Ship Channel to remain vibrant well into the next century.

In addition to ensuring that the Houston Ship Channel will remain competitive with other Gulf Coast ports, these improvements will significantly improve navigational safety in the channel.

Mr. Chairman, I have transited the Houston Ship Channel. It is a narrow and congested waterway making it dangerous for ship traffic. Not only is our port home to the largest petrochemical complex in the world, but ships are forced to pass in close proximity to each other, executing what we refer to as "Texas chicken" to maintain separation as a result of the narrow dimensions of the channel.

An additional 130 feet of width will greatly increase the navigational safety of the waterway and will help ensure that a catastrophe, like the EXXON VALDEZ, will not occur in the Ship Channel in the future.

Mr. Chairman, while this project unfortunately is not without its detractors, I am confident that you can craft an authorization which will provide the navigational and safety improvements without adversely affecting the valuable natural resources of Galveston Bay.

I would respectfully submit that this proposal should be authorized with the stipulation that the additional environmental studies agreed to by the Army Corps of Engineers and the Environmental Protection Agency will be completed. In addition, upon their completion, if these studies find deficiencies in the project, then those recommended changes should be incorporated within the final engineering and design plan.

For instance, it is conceivable that these studies could require that all dredged material be deposited offshore; that additional acres of artificial oyster reefs be built; that mitigation be provided for shrimp and fin fish impacts; and that new techniques be utilized to minimize increases in salinity, turbidity and the resuspension of toxic dredged material. Mr. Chairman, the local sponsors of this project, who will provide nearly $400 million, are prepared to accept these changes and live with the stipulations mandated by this committee.

What we can't live with, however, is inaction and further delays. If this project were authorized this year, it would be into the next century before a yard of dirt were removed. We must begin the authorization process today.

Mr. Chairman, what I am proposing is neither a new nor a radical idea. In fact, this committee adopted similar language in 1986, when it authorized the deep-draft project for Norfolk Harbor, Virginia in P.L. 99-662. I would urge you to utilize similar statutory language for the Houston Ship Channel.

While it will not be easy to balance the various competing interests, we can have a modern and efficient port system in Houston without destroying the natural resources of Galveston Bay. These two goals are not mutually exclusive. I am convinced that this project can be authorized in such a fashion so that those who utilize the Port of Houston and Galveston Bay can both be satisfied.

The people of Houston need a modern and efficient port system. I urge you and the other distinguished members of this subcommittee to authorize this vital project so that we can begin the process of modernizing our waterway for the future. With your help, we can make the future a bright one for thousands of Texans and others whose livelihoods depend on the Houston Ship Channel. Please join with us in this effort.

Thank you, Mr. Chairman.

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JF:hbw

UNITED STATES ARMY
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY
(CIVIL WORKS)

COMPLETE STATEMENT

OF

THE HONORABLE ROBERT W. PAGE
ASSISTANT SECRETARY OF THE ARMY
(CIVIL WORKS)

BEFORE THE

SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION AND INFRASTRUCTURE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

ON

WATER RESOURCES DEVELOPMENT LEGISLATION IN THE 101ST CONGRESS

MARCH 1, 1990

**NOT TO BE RELEASED UNTIL APPROVED BY THE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE**

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)
COMPLETE STATEMENT OF THE
HONORABLE ROBERT W. PAGE
BEFORE THE
SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION
AND INFRASTRUCTURE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE
MARCH 1, 1990

Mr. Chairman and Members of the Subcommittee, I am pleased and honored to be here today to testify on potential water resources development legislation in the 101st Congress. Accompanying me are Dr. G. Edward Dickey, Acting Principal Deputy Assistant Secretary of the Army (Civil Works), and Major General Patrick Kelly, Director of Civil Works of the Army Corps of Engineers.

Our testimony today addresses the Administration's views for a supportable Water Resources Development Act of 1990. First, however, I would note that without the leadership and cooperation of this committee, we could not have forged the landmark Water Resources Development Act of 1986 and followed it with the 1988 Act. Together we have affirmed the critical reforms of 1986, reestablished the two-year authorization cycle, and set the criteria for orderly development of sound water projects.

I am pleased to report to you that the Federal water resources development program is working well. In large part, cost-sharing sponsors have accepted the new project participation requirements. This should not be surprising, as the reforms of the 1986 Act were based on the recognition that water resource development projects produce tangible economic benefits and the recipients of those benefits can and should contribute the cost of the services they receive. To reduce the costs of providing those services, we have made significant internal organizational and procedural reforms to ensure that productive projects move forward according to timely schedules and within budget. In order to continue this success story, it is of prime importance to enact a Water Resources Development Act of 1990 which continues the process of putting the program on a strong beneficiary pay basis and which authorizes only projects that have completed the Executive Branch review process.

As background, I would like to discuss the general direction of the Army Civil Works program for the next decade and address two areas which deal with serious and urgent problems confronting the nation. The major issue in the water resources program during the 1980's was cost-sharing. The principle is now well established that readily identifiable beneficiaries of public services must pay a fair share of the cost of those services.

Looking ahead to the 90's, we must now focus on carrying out the water resources program in the most effective manner. To do so, we must use our resources to the optimum benefit of the nation. It is in that context that we are renewing and increasing our commitment to the quality of the environment. Despite some past criticism, the Corps of Engineers has a very good environmental record. We intend to make it even better. Projects which have favorable Chief's reports and those now in the planning phase are all designed with environmental quality in mind. Where there are unavoidable adverse impacts, those impacts are mitigated to the maximum practicable extent.

Other environmental initiatives include support for an extension of the program developed under Section 1135 of the 1986 Act to develop and fund projects for restoring environmental quality at existing projects. We have also suspended budgeting for continuation of construction of potentially environmentally damaging projects until the economic and environmental effects have been reviewed and we are satisfied that they will be sound projects from both economic and environmental perspectives. There are numerous other examples of heightened environmental sensitivity in our program.

We have also put Corps of Engineers capabilities to work on oil spill clean up activities. For example, in the Alaska oil spill, we modified a dredge to skim oil and remove it from the water. We are currently evaluating the potential and effectiveness of modifying other dredges for the same purpose.

In addition to this heightened sensitivity in Corps projects, we have made great strides in addressing environmental issues in the Corps regulatory programs. Those programs and accomplishments are the subject of separate hearings so I will not go into any details now. But we are especially pleased with the progress in dealing with wetlands issues in the 404 program.

While the principal mission of the Army Civil Works program remains water resources management and development, that mission will be carried out with an increased sensitivity to environmental quality.

I mentioned that there are two specific areas of concern that I would like to address. While these areas extend beyond the traditional water resources missions of the Army Civil Works program, I am discussing them in the context of our programs because I believe that the Army Corps of Engineers has the planning, engineering, and construction expertise that can serve our nation well in these areas. I would expect the Corps to play a significant role in any Federal Government initiatives in these areas.

The first area is national infrastructure policy. There has been a great deal of news coverage, and there are several major technical and policy reports which document the critical need to revitalize our infrastructure. Funds have been requested for 1991 for the Corps to initiate discussions with other Federal and state agencies and the private sector on the need for an integrated National infrastructure policy and possible strategies for carrying out such a policy.

The second area that I would like to highlight is the magnetically levitated (MAGLEV) transportation system. MAGLEV offers a new concept in transportation which, when creatively developed, may provide the U. S. one of its best opportunities for economic expansion in the 21st century. MAGLEV could serve as a powerful new mode of U. S. transportation and as a globally marketable industry with technological spinoffs to other U. S. industries. In addition, MAGLEV holds great promise to replace a significant number of transportation vehicles in cargo and mass transportation. This would significantly reduce air emissions and perhaps reduce demands on the current transportation infrastructure. The cooperative interagency effort that we are developing would utilize the extensive technical and management expertise of the Corps and other agencies. This effort would also include cooperation with and cost sharing by the private sector to further advance the principle of identifiable beneficiaries paying for public services. It would also advance public/private partnerships so necessary in today's complex world of tight budget constraints.

There are very pressing public demands for new water resource project development. However, these demands can be met only in the context of certain guiding principles for a Water Resources Development Act of 1990. Those principles are:

o Preserve cost sharing, without exception

o Authorized projects must be economically justified, environmentally sound, and concurred in by the Administration.

o Do not shift non-Federal responsibilities to the Federal government.

o Advance the FY 1991 Budget beneficiary pay proposals in construction, operation, and maintenance of Federal projects

o Use Army Corps of Engineers expertise to benefit the Nation as provided in the FY 1991 Budget proposals for infrastructure and magnetic levitation.

All these principles are important to a well rounded program which we believe will use the resources of the Army Corps of Engineers to the maximum benefit of the public. We expect to submit a full legislative program in the coming weeks which is faithful to these principles. I ask you for your support.

We just received a copy of S. 2183, the proposed Water Resources Development Act of 1990. We are not in a position to discuss it substantively today. However, we expect to submit the views of the Administration along with our own legislative proposals.

Mr. Chairman, that concludes my testimony. Dr. Dickey, General Kelly, and I will be happy to answer any questions that you have.

ANSWERS TO QUESTIONS BY CHAIRMAN BURDICK
DISCRETIONARY AUTHORITY

QUESTION. Do Corps district and division commanders have "discretionary authority"?

ANSWER. Generally speaking, projects are authorized and discretionary authority to make modifications is vested in the Assistant Secretary of the Army (Civil Works), who may delegate this authority to the Chief of Engineers and in turn to District or Division commanders. Before 1986, as stated in Corps regulations, this delegated authority extended to project modifications of less than 25 percent change in scope or costs. Determination of permissible scope changes were made on a case by case basis. Section 902 of the Water Resources Development Act of 1986 placed a cost increase limit on discretionary changes that can be made to projects. Under Section 902 the Secretary may increase the cost of authorized projects for modifications which do not materially alter the scope or functions of a project, but not by more than 20 percent of authorized project costs. Recent changes in project review and management procedures have been designed to ensure that changes in scope and cost receive close scrutiny by all levels of Corps management and this office. All basic projects and project changes are reported through a "life cycle project management" monthly reporting system, giving my office continuous oversight of project development and allowing us to take actions required to maintain continued conformance with planning criteria and authorized construction activities.

QUESTION. Would you please define the "discretionary authority"?

ANSWER. The discretionary authority of the Secretary of the Army is the authority of the Secretary to make certain engineering and construction changes to the authorized plan of improvement for a project as a matter of authority delegated to him by Congress and without any requirement to obtain further authorization from Congress. Typically, the changes made under this authority fall into two general classes of permissable modifications - changes that are necessary for engineering and construction reasons to produce the full usefulness of the improvement envisioned by Congress and changes that involve moderate extensions of authorized project limits to meet changing economic or engineering considerations. The authority is not considered to include matters which materially alter the scope, the function, or purpose of a project or embody changes in the elements of a project which involve legal relationships, such as the requirements of local cooperation for a project. The authority is discussed at length in Environmental Defense Fund v. Alexander, 467 F. Supp. 885 (1979).

QUESTION. Can you tell the Committee what the limits are to this authority?

ANSWER. As discussed, the Secretary is restricted from making changes to authorized projects that materially alter the scope, function or purpose of a project, or contemplate changes in legal relationships for projects. For cost changes, this has been quantified to a 20 percent limit by the 1986 Water Resources Development Act (Section 902). Under our new management procedures, all project cost increases must be approved by the Director of Civil Works, and all significant changes prior to, and during construction are reported to the Assistant Secretary (Civil Works) through the monthly review process. Operation and maintenance of Corps projects are based on specific authorization and published O&M plans developed through public coordination. O&M activities are expected to conform to the published plan.

QUESTION. In your capacity as Assistant Secretary, what procedures do you have to review decisions which are made under this discretionary authority?

ANSWER. As previously stated, all projects with significant changes are reported to this office through the LCPM process. In addition, this office must approve the Corps' budget request before it is transmitted to the President and to Congress. The budget contains descriptions and specific allocations to individual projects and notes any changes in the projects which occurred subsequent to the previous budget submission.

QUESTION. How would you know if a District or Division Commander exceeded his "discretionary authority"?

ANSWER. Our current system is structured to highlight major changes in scope, schedule, and costs and to provide a thorough review of the circumstances of all such changes. These changes are reported monthly to my office through the LCPM reporting system.

QUESTION. Please provide a listing of the instances when a District or Division Commander has used "discretionary authority" in the last ten years.

ANSWER. Following is a list of selected instances in which discretionary authority has been used.

PROJECT NAME	DATE CHANGE WAS APPROVED	DESCRIPTION OF CHANGE
New Orleans to Venice, LA.	23 Oct 87	Levee raised in 3 reaches for hurricane protection.
Lake Pontchartrain and Vicinity, LA. (Orleans Parish)	22 Feb 85	Levee design from 14.5 ft. I-wall to 16 ft. clay fill.
Lake Pontchartrain and Vicinity, LA. (Jefferson Parish)	8 Feb 88	Levee from hydraulically dredged fill with riprap to clay fill with geotextiles.
St. Francis River Basin, MO. & AK.	23 Dec 87	21 miles of seepage control channel added landside of levees.

Tensas River, LA.	5 Jul 84	Channel design coefficient (C) of 50 reduced to (C) 50 and 35 plus clearing and snagging.
Yazoo Basin, MS.	12 Nov 87	East bank levee of Panola-Quitman Floodway reduced from 50 to 10-year level of protection.
Oahe Dam & lake Oahe, ND, SD; Big Bend Dam & lake Sharpe, SD	June 1982, December 1987	Post-authorization Change Report approved by MRD in 1982 identifying mitigation work at the existing projects. A design memorandum on the Mitigation Plan was approved by MRD in 1987.
Westerly Creek, CO	1988	GDM No. SPW-1 (rev) approved by MRD to reduce level of protection, modify configuration of collector channels, change borrow limits, and change modifications to existing Kelly Road Dam. Plans and specifications approved by MRD.
Main Stem Missouri River Reservoirs	1981	Navigation season shortened by three weeks. Full service flows maintained for full eight month season.
	1985	End of navigation season was extended by ten days for support of delay in opening 1986 season by ten days.
	1988	Full service flows maintained for navigation season which was shortened by two weeks, 1989 season opening delayed for one week.
	1989	Flows greater than minimum flow provided during navigation season, season shortened by one month, 1990 season opening delayed by one week.
	Winter 1989	Releases increased to provide depth at downstream to provide power plant cooling water intakes.
	1990	Navigation season to be shortened by one month.
Fort Randall Dam, SD	1989	Fall drawdown limited to less than criteria in order to provide adequate pool level at Oacomo, SD, municipal water intake. A

		similar change has been approved for 1990.
Gavins Point Dam, SD, NE	1989-1990	Releases increased to facilitate water intakes that have been impacted by channel degradation. Additional increases were required during ice buildup periods.
Virginia Beach, VA Erosion Control & Hurricane Protection	23 Dec 87	Extension of approximately 16 feet of seawall from 57th Street to 58th Street.
Delaware River, NJ Vicinity of Camden (Beckett St. Terminal)	5 Jan 90	Incorporate the extension of the eastern limit of the Federal channel into the Final GDM.
South Quincy, IL	3 Jun 88	Deletion of Drainage Facilities as a project feature.
Bettendorf, IA	28 Jun 85	Added culverts along Elm St. for interior drainage.
	28 Jun 85	Added fendering of docking facilities.
Bassett Creek, MN	3 Jun 88	Change from soft-ground tunnel to cut-and-cover pipe
	24 Mar 88	Relocate connection to existing tunnel
Rochester, MN	24 May 87	Change wall design from sheetpile to concrete
St. Paul, AK	March 1988	Change in project scope; new wave and climatic information, along with changed conditions generated a need to increase the size of the breakwater. The associated cost increase was less than 20 percent.
Grays Harbor, WA	March 1989	Change in project scope; project depth and cost decreased.
S.F. Bay to Stockton Ship Channel, CA	1989	Eliminated project setback levees: not required.
Oakland Harbor, CA	1987	Reduced width of outer Harbor Channel based on ship simulator study.

Alamogordo, NM	1986	Authorized in accordance with HD 473 on 12 July 1962. The project was placed in the inactive category when there was no local cooperation. No PAC was required. Approximately 12,000 feet of diversion channel were realigned 2000 feet upward on an alluvial slope. This shortened the project by 4000 feet. The BCR was unchanged. The original plan could not be developed because of changed urban development.
Fountain Creek, Pueblo, CO	post 1986	Authorized by post 1986 WRDA '86. During preparation of the GDM, the levee cross section was altered in view of the narrow widths in the channel. Soil cement and 700 feet of floodwalls were substituted for earth levees. About $500,000 was saved through these design modifications.
Cooper Lake & channels, TX	23 Apr 86	A gated spillway and uncontrolled auxiliary spillway were replaced with one uncontrolled spillway. In addition, refinements were made to the embankment. This resulted in a cost savings of $21,253,000.
San Antonio Channel Improvement, TX	21 Feb 86	San Antonio Channel Improvement. was changed from open channel to tunnels for two segments. These were San Pedro Creek approved for a $7,000,000 savings, and the San 20 Feb 86 Antonio River, approved for an estimated savings of $60,000,000.
Vince and Little Vince Bayous, TX	4 Apr 86	Approved the substitution of a box culvert in lieu of a concrete lined channel. The local sponsor bore the additional expense.

McClellan Kerr
Navigation
System, AR & OK:

Dam #2	1 Oct 83	Stilling basin enlargement
Dam #2	10 May 85	Jards Point land acquisition
Pool #7	10 May 85	High rock excavation
Dam #2	29 Jun 88	Stilling basin enlargement

MISSOURI RIVER NAVIGATION RELEASES

QUESTION. Does the Corps of Engineers have any authority to release water from the mainstem Missouri River reservoirs specifically to benefit navigation on the Mississippi River?

ANSWER. A clear definition of our authority in this area has not been made. The authorization of the Pick-Sloan plan for the development of the Missouri River Basin in Section 9 of the Flood Control Act of 1944 recognizes that use of the waters stored in the main stem reservoirs of the Missouri River for multiple purposes would also improve low-water flows in the Mississippi River. Correspondingly, releases of water from the main stem Missouri River reservoir system to serve the multiple purposes of the Missouri River basin also benefit Mississippi River navigation. Any releases above those which are required to serve the needs of the Missouri River basin multiple purposes for the specific purpose of benefiting the Mississippi River would only be considered in response to a navigation emergency on the Mississippi.

OPERATING PLANS

QUESTION. Please provide a list of all projects operated by the Corps of Engineers and the date on which each project's operating plan was last updated.

ANSWER. Corps of Engineers projects for which water control plans and water control manuals are required are listed in the attached copy of Appendix E, Engineer Regulation 1110-2-240, which is published in the Code of Federal Regulations, 33 CFR 222.7. Preparation and modification of water control plans and manuals by the district and division offices is a continuous process that is dependent on the availability of funds and manpower. Water control plans and manuals have been prepared for most water-regulating projects although the status of their modification for updating and other purposes varies. Water control plans, which are essential for project operation and which constitute the principal element of the manuals, are all complete. However, not all water control manuals are complete. Again, this is because of resource constraints, principally funding. Revision dates of the water control plans and manuals for all the water-regulating projects listed in the attachment are not readily available. However, such information will be available at HQUSACE later this year in conjunction with the ongoing expansion of the Corps water control management data base. We will provide that information when it is completed.

FEDERAL INTEREST

QUESTION. On what basis has the term "federal interest" been used to define the appropriateness of particular water project plans?

ANSWER. The term "Federal Interest" has been used by the Army Corps of Engineers to define when a project has project purposes, economic justification and meets various policies sufficient for Administration support for budgeting. From recent discussions with various interested parties, we recognize that use of the term "Federal Interest" is causing confusion particularly when specific projects or project purposes have congressional support or authorization but are not supported by the Administration. Thus, we will discontinue use of the term "federal interest" in describing Administration policy views on projects. We do not have an alternative te~~a~~rm as yet, but expect to in the very near future.

QUESTION. What, in your view, is the difference between the term "federal interest", and the term "policy of the President"?

ANSWER. As noted above, we are discontinuing use of the term "federal interest" because of the potential confusion in differentiating it from the policies of the President.

RECREATION

QUESTION. On what basis would you oppose the construction of a project with a positive benefit/cost ratio and which provided only recreation benefits?

ANSWER. Consistent with the Administration's assessment of national priorities for Federal investments and the objectives of avoiding large budget deficits, we have given primary emphasis to projects with the priority outputs of commercial navigation, flood damage reduction, hurricane and storm damage reduction, and environmental mitigation or restoration. Hydropower and municipal or industrial water supply may also be included, but only when provided in conjunction with these outputs. Construction of projects that provide only recreation benefits should be undertaken by non-Federal public or private entities.

CONSTRUCTION OF ENVIRONMENTAL ENHANCEMENT

QUESTION. On what basis would you support the construction of environmental enhancement projects, and how would your prioritize among such projects?

ANSWER. As noted previously, we have given primary emphasis to the priority outputs of commercial navigation, flood damage reduction, hurricane and storm damage reduction, environmental mitigation or restoration, and hydropower and municipal or industrial water supply in conjunction with these outputs. However, fish and wildlife measures identified as enhancement may be included in project plans according to their ability to effect demonstrated improvement to significant fish and wildlife resources when compared to "future without plan conditions". Because of budget limitations, we believe it is far more beneficial to the public to focus on mitigation and restoration rather than embark upon new enhancement programs, at least for the forseeable future.

SINGLE BENEFICIARIES

QUESTION. You have corresponded recently with the Committee concerning the single entity rule. It is the position of your office that this management decision has been specifically authorized by Congress? Endorsed by Congress? What does "single entity" mean? Empirically how do you know one exists? What process does your office have for establishing that such an entity exists and that if it exists that it would actually "benefit" singly from project development? Is there any legal definition of the term "single entity"?

ANSWER. The policy stems from Section 2 of the River and Harbor Act of 1920, which required the Chief of Engineers to make a determination of the general versus the special interest in an improvement, and recommend an appropriate sharing of costs between Federal and non-Federal interests. The recent policy regulation represents a clarification of longstanding policy, and not new policy, therefore, the need for endorsement was not considered. The clarification, which focuses on property ownership, is more straightforward than previous guidance which used "single beneficiaries," an ambiguous term that presented definition and evaluation problems. The policy precludes projects which would benefit a property under single-ownership (a single entity). In a single-owner situation there is no need for a collective action, the owner can finance the desired improvement and recover costs through adjustments of rates charged to others for use of the facility or through savings from reduced operating costs. The presence of a single-owner is determined by observation. There is no legal definition of the term "single entity." After many years of experience with single beneficiary/single-owner policy, only a "handful" of projects have been impacted by the guidance.

ENVIRONMENTAL ENHANCEMENT

QUESTION. What is your view on providing to the Corps of Engineers the generic authority to promote environmental enhancement of water and port areas through the removal of toxic and related material from such waters when such removal would be unconnected with navigation?

ANSWER. If the Congress and the Executive Branch choose to add and fund such a mission, the Corps has the planning, engineering, scientific, and management capability to carry out the work. The Corps should work closely with the U.S. Environmental Protection Agency and other resource agencies in carrying out a program of this nature. However, in recognition of finite budget limits, we would note that funds would likely have to be diverted from traditional navigation and flood control activities unless funding were to be obtained from another source.

HARBOR MAINTENANCE TRUST FUND

QUESTION: Regarding the Administration's port user fee proposal, I have a concern. Does the Administration intend to define what the universe of channels and harbors covered by future maintenance will be when this fee becomes law? To insure that this happens, and that the definition of what is covered by "100% of federal maintenance costs" is not reduced in the future from what the federal government is currently responsible to maintain, I would request the following information: a complete list of all harbors and channels for which the federal government is now responsible to maintain; a complete list of all harbors and channels which will be maintained in perpetuity should this fee become law; and a list of all harbors and channels which the Administration intends no longer to support whether this fee becomes law or not? Does the administration intend to introduce legislation to deauthorize any of these channels or harbors?

ANSWER. Title XIV of the Water Resources Development Act of 1986, currently authorizes a Harbor Maintenance Fee 0.04% of the value of cargo loaded or unloaded at harbors constructed or maintained by the Corps of Engineers since 1977. Monies from this user's fee recovers approximately 40% of the Corps annual

Operation and Maintenance (O&M) cost for commercial navigation. The proposed legislation simply increases the fee to a level adequate to recover 100% of the Corps O&M cost. There would be no change in the universe of channels and harbors covered by this fee. This list of projects was submitted to the Assistant Commissioner of the U.S. Customs Service on 13 February 1987, as part of the implementation of the law. At that time, 414 projects were identified as having expenditures subject to recovery. These projects were summarized by port name and initially published in Part IV of the Federal Register on March 30, 1987 as an Interim regulation of the Customs Service. The same port list was reissued in The Federal Register Vol 52, No. 134 on Tuesday, July 14, 1987 with more detailed port descriptions. A copy of this port list is enclosed. The universe of ports and harbors covered by this legislation has not changed since that date, and the only reason it would change in the future is if a new project is constructed or a project not maintained since 1977 would require maintenance.

The decision to maintain or not maintain a harbor or channel is totally independent of its users fee status. It is not possible to give assurance that any port will be "maintained in perpetuity" regardless of the status of cost recovery, nor are there plans to deauthorize any of these channels or harbors because of the fee. The implementation of the Harbor Maintenance Fee in 1987, did not change the process by which funds are appropriated for channels and harbors. I do not expect changes in the process to occur because of an increase in this fee.

INTEREST REVIEW

QUESTION. Why are civil works EC's and ER's not subject to a public interest comment and review? Why are they outside the Administrative Procedures Act?

ANSWER. Our civil works EC's and ER's are subject to the Administrative Procedures Act to the extent that they affect the general public, i.e., have general applicability or legal affect. As an example, if a regulation, or a portion of a regulation, imposes a penalty or prescribes a required course of conduct on the part of the general public, that regulation, or portion of the regulation, must be published in accordance with the requirements of the Administrative Procedures Act. If the regulation, or portion of the regulation, is not published, then it will not legally bind the public. Regulations also must be published if they inform the public of Corps policy.

MISSOURI BASIN WATER SUPPLIES

QUESTION. The continuing drought in the Missouri River basin has raised concerns about the ability of cities and utilities downstream of the reservoirs to draw adequate supplies of water. Is there a role for the Corps to play in addressing this problem? Are there significant trade-offs between the value of reservoir releases and water intake modification?

ANSWER. There is a role for the Corps to play in addressing the problem of critical utilities receiving adequate supplies of water downstream of the reservoirs.

There may be opportunities to reduce requirements for reservoir releases through intake modifications. This is currently being investigated in the Phase 1 of the Master Water

Control Manual Review and Update; however, the magnitude of this trade-off will need to be studied further during Phase 2 which is scheduled for completion in February 1992. In addition, the Corps can provide for reallocation of storage in upstream reservoirs to provide storage for municipal and industrial water supply use for downstream water supplies.

DEPARTMENT OF THE ARMY
U. S. Army Corps of Engineers
Washington, DC 20314-1000

ER 1110-2-240
Change 1

DAEN-CWH-W

Regulation
No. 1110-2-240

30 April 1987

Engineering and Design
WATER CONTROL MANAGEMENT

1. This change to ER 1110-2-240, dated 8 October 1982, corrects the original Appendix E which is now void.

2. Substitute the attached pages as shown below:

Remove pages	Insert pages
Appendix E	Appendix E

3. File this change sheet in front of the publication for reference purposes.

FOR THE COMMANDER:

ARTHUR E. WILLIAMS
Colonel, Corps of Engineers
Chief of Staff

APPENDIX E—LIST OF PROJECTS

Project name [1]	State/county	Stream [1]	Project purpose [2]	Storage 1,000 AF	Elev limits feet M.S.L.		Area in acres		Auth legis [3]
					Upper	Lower	Upper	Lower	
Lower Mississippi Valley Division									
Alligator—Catfish FG	MS Issaquena	Little Sunflower	F	0.0	0.0	0.0	0	0	FCA Jun 36.
Arkabutla Lk	MS Desoto	Coldwater	F	525.0	238.3	209.3	33,400	5,100	FCA Jun 36.
Ascalmore—Tippo FG & CS	MS Tallahatchie	Ascalmore	F	0.0	136.0	118.0	0	0	FCA Jun 36.
Bienvenue FG	LA St Bernard	Bayou Bienvenue	F	0.0	2.0	2.0	0	0	PL 298-89
Big Lk Ditch #81 CS	AR Mississippi	Ditch 81 Extension	C	0.0	0.0	230.0	0	0	FCA Oct 65.
Big Lk Div CS	AR Mississippi	Little R	C	0.0	0.0	230.0	0	0	FCA Oct 65.
Big Lk North End CS	AR Mississippi	Little R	C	0.0	0.0	230.0	0	0	FCA Oct 65.
Big Lk South end CS	AR Mississippi	Ditch 28	C	0.0	0.0	230.0	0	0	FCA Oct 65.
Birds Point—New Madrid Div Floodway.	MO New Madrid	Mississippi	F	0.0	330.5	328.5	131,000	71,000	FCA May 28.
Bodcau Lk	LA Bossier	Bayou Bodcau	F	35.3	199.5	157.0	21,000	110	PL 74-830.
Bonnet Carre Div Spillway	LA St Charles	Mississippi R	F	0.0	24.0	20.0	0	0	FCA May 28.
Bowman Lock	LA Vermilion	GIWW	I	0.0	1.2	1.2	0	0	PL 79-14.
Caddo Lk	LA Caddo	Cypress Bayou	N	128.6	182.7	168.5	59,000	26,800	FCA Oct 65.
Cairo 10th & 20th St PS	IL Pulaski	Ohio	F	0.0	310.5	299.0	0	0	PL 90-483.
Calcasieu SW Barrier & Lock	LA Calcasieu	Calcasieu R	I	0.0	1.2	1.2	0	0	RHA Oct 62. PL 79-525.
Calion L&D	AR Union	Ouachita	N	0.0	77.0	77.0	12,200	12,200	RHA 1950.
Calumet FG East & West	LA St Mary	Wax Lake Outlet Bayou Teche.	FN	0.0	3.0	3.0	0	0	FCA Jun 36.
Cannon Re-reg	MO Ralls	Salt R	PCA	5.8	528.0	521.0	1,020	460	HD 507.
Carlyle Lk	IL Clinton	Kaskaskia R	F	699.0	462.5	445.0	50,440	24,580	SD 44
			HMCAR	233.0	445.0	429.5	0	7,100	
Catahoula Lk CS	LA LaSalle	Catahoula Div	CR	118.0	34.0	27.0	25,000	94	RHA 1960.
Catfish Point CS	LA Cameron	Mermentau R	FN	0.0	1.2	1.2	0	0	FCA Aug 41, RHA Jul 64.
Charenton FG	LA St Mary	Grand Lk	FN	0.0	0.0	0.0	0	0	RHA Jul 46, FCA May 28.
Cocodrie FG FG	LA Concordia	Bayou Cocodrie	F	0.0	46.0	13.0	0	0	FCA Aug 41.
Collins Cr	MS Warren	Collins Cr	F	0.0	84.0	67.0	0	0	FCA 1941.
Columbia L&D	LA Caldwell	Ouachita	N	0.0	52.0	52.0	7,070	7,070	RHA 1950.
Connerly CS	AR Chicot	Connerly Bayou	FCR	0.0	116.0	108.0	0	0	FCA Aug 68.
Courtableau Drainage CS	LA St Landry	Bayou Courtableau	F	0.0	18.0	18.0	0	0	FCA May 28, PL 391-70.
Darbonne CS	LA St. Landry	Bayou Darbonne	FI	0.0	18.0	18.0	0	0	FCA May 28 PL391-70.
DeGray LK	AR Desoto	Caddo	FNPMRA	881.9	423.0	345.0	23,800	6,400	RHA 1950, WSA 1958
DeGray Rereg. St	AR Clark	Caddo	NMRA	3.8	221.0	209.0	430	90	RHA 1950.
Ditch Bayou Dam	AR Chicot	Ditch Bayou	FCR	0.0	106.0	93.0	0	0	FCA Aug 68
Drainage Dist #17 PS	AR Mississippi	Ditch 71	F	3.0	236.0	226.0	4,100	0	FCA Aug 68, PL 90-483.
Drinkwater PS	MO Mississippi	Drinkwater Sewer	F	20.6	315.0	307.0	4,000	700	FCA May 50, PL 516
Dupre FG	LA St Bernard	Bayou Dupre	F	0.0	2.0	2.0	0	0	PL 298-89
East St Louis PS	IL St. Clair	IDD	F	0.0	0.0	0.0	0	0	FC Act 36
Empire FG Hurr Prot & Lock	LA Plaque mines	Mississippi R	F	0.0	5.0	5.0	0	0	PL 874-87.
Enid Lk	MS Yalobusha	Yacona	F	660.0	268.0	230.0	28,000	6,100	FCA Jun 36
Felsenthal L&D	AR Union	Ouachita	N	32.5	70.0	65.0	46,500	17,500	RHA 1950.
Finley Street PS	TN Dyer	Forked Deer	F	0.5	269.0	257.0	94	22	FCA 1946, PL 85-500
Freshwater Lock	LA Vermilion	Freshwater Bayou	I NI	0.0	0.0	0.0	0	0	PL 86-645
Graham Burke PS	AR Phillips	White	F	2,805.0	174.8	140.0	149,000	2,500	FCA May 28, PL 85-500
Grenada Lk	MS Grenada	Yalobusha Skuna	F	1,357.4	231.0	193.0	64,600	9,800	FCA Jun 36
Hurtable PS	AR Lee	St Francis	F	2,863.0	207.2	165.0	18,500	1,400	FCA May 50
Jonesville L&D	LA Catahoula	Black	N	0.0	34.0	34.0	7,120	7,120	RHA 1950
Kaskaskia L&D	IL Randolph	Kaskaskia R	N	1.1	368.0	363.0	1,300	1,200	SD 44
L&D 1	LA Catahula	Red R	N	0.0	40.0	40.0	0	0	PL 90-483
L&D 2	LA Rapides	Red R	N	0.0	71.2	64.0	0	0	PL 90-483
L&D 3	LA Rapides	Red R	N	0.0	95.0	91.5	0	0	PL 90-483
L&D 4	LA Natchitoches	Red R	N	0.0	120.0	119.6	0	0	PL 90-483
L&D 5	LA Red R	Red R	N	0.0	145.0	140.2	0	C	PL 90-483.
L&D 24	MO Pike	Mississippi R	N	29.7	449.0	445.0	13,000	12,000	R&H Act, Jul 3/30 R&H Act, Aug 30/35.
L&D 25	MO Lincoln	Mississippi R	N	49.7	434.0	429.7	18,000	16,600	R&H Act, Jul 3/30 R&H Act, 8/30/35.
L&D 26	IL Madison	Mississippi R	N	107.1	419.0	414.0	30,000	27,700	R&H Act, Jul 3/30 R&H Act, 8/30/1935
Larose to Golden Meadow Hurr Prot FG.	LA LaFourche	Bayou LaFourche	F	0.0	3.0	3.0	0	0	FCA Oct 65, PL 89-298.
Little Sun flower CS	MS Issaquena	Lit. Sunflower	F	0.0	85.0	80.0	0	0	FCA 1941.
Lk #9 Culvert & PS	KY Fulton	Mississippi	F	6.5	286.0	282.0	0	0	FCA Oct 65.
Lk Chicot PS	AR Chicot	Macon Lk	FCR	0.0	118.2	90.0	0	0	FCA Aug 68.
Lk Greeson	AR Pike	Little Missouri	P	0.0	563.0	436.9	0	0	FCA 1941.
			FP	407.9	563.0	504.0	9,800	2,500	
Lk Ouachita	AR Garland	Ouachita	P	0.0	592.0	480.0	0	0	FCA Dec 44.
Long Branch DS	LA Catahoula	Catahoula Div	F	0.0	32.5	32.5	0	0	FCA May 50.
Mark Twain Lk	MO Ralls	Salt R	F	894.0	638.0	606.0	38,400	18,600	HD 507.
			PMCAR	457.0	606.0	567.2	18,600	5,900	
Marked Tree Siphon	AR Poinsett	St. Francis	F	0.0	229.0	198.3	0	0	FCA Jun 30.
Morganza Div CS	LA Point Coupee	Morganza Floodway	F	0.0	59.5	49.0	0	0	FCA May 28
Muddy Bayou CS	MS Warren	Muddy Bayou	FC	30.0	76.9	70.0	4,350	2,860	FCA Oct 65.
Old River Div CS Low Sill Overbank & Aux.	LA W Feliciana	Old R	F	0.0	70.0	5.0	0	0	PL 83-780.
Old River Lock	LA W Feliciana	Old R	N	0.0	65.4	10.0	0	0	FCA Sep 54, PL 780-83
Port Allen Lock	LA Port Allen	GIWW	N	0.0	46.1	2.6	0	0	RHA Jul 46

APPENDIX E—LIST OF PROJECTS—Continued

Project name [1]	State/county	Stream [1]	Project purpose [2]	Storage 1,000 AF	Elev limits feet M.S.L.		Area in acres		Auth legis [3]
					Upper	Lower	Upper	Lower	
Prairie Dupont East & West PS	IL St Clair	IDD	F	0.0	0.0	0.0	0	0	FC Act 62.
Rapides-Boeuf Div Canal CS	LA Rapides	Bayou Rapides	F	0.0	86.0	82.2	0	0	FCA Aug 41, GD 359-77.
Rend Lk	IL Franklin	Big Muddy R	F	109.0	405.0	410.0	24,800	18,900	HD 541.
			MA	160.0	405.0	391.3	18,900	5,400	
Sardis Lk	MS Panola	Little Sunflower	F	1,569.9	281.4	236.0	58,500	10,700	FCA Jun 36.
Schooner Bayou CS & Lock	LA Vermilion	Schooner Bayou	I	0.0	1.2	1.2	0	0	FCA Aug 41
Shelbyville Lk	IL Shelby	Kaskaskia R	F	474.0	626.5	599.7	25,300	11,100	HD 232.
			NMCAR	180.0	599.7	573.0	11,100	3,000	
Sorrell Lock	LA Iberville	GIWW	N	0.0	29.7	3.5	0	0	FCA May 28
St Francis Lk CS	AR Poinsett	Oak Donnick Floodway	C	0.0	0.0	210.0	0	2,240	FCA Oct 65
Steele Bayou CS	MS Issaquena	Steele Bayou	F	0.0	68.5	60.0	0	0	FCA 1941.
Tchula Lk Lower FG	MS Humphreys	Tchula Lk	F	0.0	110.0	84.0	0	0	FCA Jun 36
Tchula Lk Upper FG	MS Humphreys	Tchula Lk	F	0.0	108.0	92.0	0	0	FCA Jun 36
Teche-Vermilion PS & CS	LA St Mary	Atchafalaya R	MI	0.1	18.0	16.0	0	0	PL 89-789, FCA May 28
Tensas-Cocodrie PS	LA Cocordia	Bayou Corcodrie	F	0.0	37.0	23.0	0	0	FCA Oct 65
Treasure Island PS	MO Dunklin	Little R	F	23.4	252.0	235.0	7,800	180	FCA Jul 46
Wallace Lk	LA Caddo	Cypress Bayou	F	96.1	158.0	142.0	9,300	2,300	RHA Mar 45, PL 75-761
Wappapello Lk	MO Wayne	St Francis R	F	613.2	394.7	354.7	23,200	5,200	HD 159
Wasp Lk	MS Humphreys	Wasp Lk-Bear Cr	F	0.0	111.6	88.5	0	0	FCA Jun 36
West Hickman PS	KY Fulton	Mississippi	F	0.0	302.0	296.0	9	4	FCA 1948
Wood R PS	IL Madison	IDD	F	0.0	0.0	0.0	0	0	FC Act 38.
Yazoo City PS	MS Yazoo	Yazoo	F	0.0	96.0	69.0	0	0	FCA Jun 36
Missouri River Division									
Bear Creek Dam & Res	CO Jefferson	Bear Cr	F	28.8	5,635.5	5,558.0	718	109	PL 90-483
			FCR	1.9	5,558.0	5,528.0	109	17	SD 87-90
Big Bend Dam & Lk Sharpe	SD Lyman Buffalo Hughes	Missouri R	F	61.0	1,423.0	1,422.0	61,000	60,000	PL 78-534
			FNPIMCAR	117.0	1,422.0	1,420.0	60,000	57,000	SD 247-78
Blue Springs Dam & Lk	MO Jackson	Little Blue R	F	15.8	820.0	802.0	982	722	PL 90-483.
			FRC	10.8	802.0	760.0	722	0	HD 169-90
Blue Stem Lake & Dam 4	NE Lancaster	Olive Br Salt Creek	F	7.2	1,322.5	1,307.4	660	315	PL 85-500
			FCR	3.0	1,307.4	1,277.0	315	1	HD 396-84
Bowman-Haley Dam & Res	ND Bowman	No Fk Grand River	F	72.7	2,777.0	2,754.8	5,131	1,732	PL 87-874
			FMCR	15.5	2,754.8	2,740.0	1,732	565	HD 574-87
Branched Oak Lk & Dam 18	NE Lancaster	Oak Creek trib Salt Creek	F	71.6	1,311.0	1,284.0	3,640	1,780	PL 85-500
			FCR	26.0	1,284.0	1,250.0	1,780	0	HD 396-84
Bull Hook Dam	MT Hill	Bull Hook Cr Scott Coulee	F	6.5	2,593.0	2,540.0	283	0	PL 78-534
Cedar Canyon Dam	SD Pennington	Deadman's Gulch	F	0.1	3,545.0	3,526.0	11	2	PL 80-858
Chatfield Dam & Res	CO Douglas	S Platte	F	204.7	5,500.0	5,432.0	4,742	1,412	PL 81-516
			FQ	26.7	5,432.0	5,385.0	1,412	12	HD 669-80
Cherry Cr Dam & Res	CO Araphahoe	Cherry Cr	F	80.0	5,598.0	5,550.0	2,637	852	PL 77-228
			FR	14.0	5,550.0	5,504.0	852	0	HD 426-76, PL 78-534
Clinton Dam & Lk	KS Douglas	Wakarusa R	F	267.8	903.4	875.5	12,891	7,006	PL 87-874
			FMCAR	129.2	875.5	820.0	7,006	0	SD 122-87
Cold Brook Dam & Res	SD Fall River	Cold Brook	F	6.7	3,651.4	3,585.0	198	36	PL 77-228
			FR	0.5	3,585.0	3,548.0	36	0	HD 655-76
Conestoga Lake & Dam 12	NE Lancaster	Holmes Cr Trib to Salt Cr	F	8.0	1,252.0	1,232.9	620	230	PL 85-500
			FCR	2.6	1,232.9	1,197.0	230	1	HD 396-84
Cottonwood Springs Dam & Res	SD Fall River	Cottonwood Springs Cr	F	7.7	3,936.0	3,875.0	214	44	PL 77-228
			FR	0.2	3,875.0	3,868.0	44	30	HD 655-76
Fort Peck Dam & Res	MT Valley, Mc Cone Garfield	Missouri R	F	977.0	2,250.0	2,246.0	249,000	240,000	PL 73-409
			FNPIMCAR	13,649.0	2,246.0	2,160.0	240,000	92,000	PL 75-529, HD 238-73
									PL 78-534, SD 247-78
Fort Randall Dam, Lk Francis Case	SD Gregory Charles	Missouri R	F	985.0	1,375.0	1,365.0	102,000	95,000	PL 78-534
			FNPIMCAR	3,021.0	1,365.0	1,320.0	95,000	41,000	SD 247-78
Garrison Dam, Lk Sakakawea	ND Mercer McLean	Missouri R	F	1,494.0	1,854.0	1,850.0	382,000	365,000	PL 78-534
			FNPIMCAR	17,440.0	1,850.0	1,775.0	365,000	129,000	SD 247-78
Gavins Point Dam, Lewis & Clark Lk	SD Yankton	Missouri R	F	61.0	1,210.0	1,208.0	32,000	29,000	PL 78-534
	NE Knox		FNPIMCAR	95.0	1,208.0	1,204.5	29,000	25,000	SD 247-78
Glenn Cunningham Lk, Dam 11	NE Douglas	Little Papillion Cr	F	14.0	1,142.0	1,121.0	922	392	PL 90-483
			FRCA	3.9	1,121.0	1,085.0	392	0	HD 349-90
Harlan County Lk	NE Harlan	Republican R	F	498.0	1,973.5	1,946.0	23,064	13,249	PL 77-228.
			FI	342.6	1,946.0	1,875.0	13,249	0	HD 892-76, PL-78-534
Harry S Truman Dam & Res	MO Benton	Osage R	F	4,005.9	739.6	706.0	209,300	55,600	PL 83-780
			FPCR	1,203.4	706.0	635.0	55,600	0	HD 549-81, PL 87-874
									HD 578-87
Hillsdale Lk	KS Miami	Big Bull Cr	F	83.6	931.0	917.0	7,410	4,580	PL 83-780.
			FNMCAR	76.3	917.0	852.4	4,580	0	HD 642-81
Holmes Park Lk & Dam 17	NE Lancaster	Antelope Cr Trib to Salt Cr	F	5.7	1,266.0	1,242.4	410	100	PL 85-500
			FCR	0.8	1,242.4	1,218.0	100	3	HD 396-84
Kanopolis Lk	KS Ellsworth	Smoky Hill R	F	370.0	1,508.0	1,463.0	13,999	3,560	PL 75-761
			FI	55.8	1,463.0	1,425.0	3,560	0	PL 78-534, HD 842-78
Kelly Road Dam	CO Araphoe	Westerly Cr	F	0.3	5,362.0	5,342.0	38	0	PL 80-858, PL 84-99
Long Branch Lk	MO Randolph	Little East Fk Chariton R	F	30.4	801.0	791.1	3,670	2,429	PL 89-299
			FCAR	34.6	791.0	751.1	2,429	0	HD 235-89
Longview Lk	MO Jackson	Little Blue R	F	24.8	909.0	891.0	1,960	930	PL 90-483
			FCAR	22.1	891.0	810.0	930	0	HD 169-90
Melvern Lk	KS Osage	Marais des Cygnes R	F	208.4	1,057.0	1,036.0	13,948	6,928	PL 83-780

APPENDIX E—LIST OF PROJECTS—Continued

Project name [1]	State/county	Stream [1]	Project purpose [2]	Storage 1,000 AF	Elev limits feet M.S.L.		Area in acres		Auth legis [1]
					Upper	Lower	Upper	Lower	
			FNMCAR	154.4	1,038.0	980.0	6,928	0	PL 75-761, HD 549-81
Milford Lk	KS Geary	Republican R	F	756.7	1,176.2	1,144.4	27,255	17,270	PL 83-780
			FCA	388.8	1,144.4	1,080.0	15,709	0	HD 642-81, PL 75-781
Oahe Dam & Lk	ND 4 Counties SD 8 Counties	Missouri R	F	1,097.0	1,620.0	1,617.0	373,000	358,000	PL 78-534
			FNPMCAR	16,789.0	1,617.0	1,540.0	358,000	117,000	SD 247-78
Olive Cr Lk & Dam 2	NE Lancaster	Olive Br of Salt Cr	F	4.0	1,350.0	1,335.0	355	174	HD 396-84
			FCR	1.5	1,335.0	1,314.0	174	4	PL 85-500
Papio Dam Site #18 & Lk	NE Douglas	Boxelder Cr Papio Cr	F	7.1	1,128.2	1,110.0	595	255	PL 90-483
			FCAR	3.4	1,110.0	1,080.5	255	0	HD 349-90
Papio Dam Site #20 & Lk	NE Sarpy	Trib South Branch Papio	F	6.1	1,113.1	1,096.0	493	246	PL 90-483
			FCAR	2.7	1,096.0	1,069.0	246	10	HD 349-90
Pawnee Lk & Dam 14	NE Lancaster	No. Middle Cr of Salt Cr	F	21.0	1,263.5	1,244.3	1,470	728	PL 85-500
			FCR	8.5	1,244.3	1,208.0	728	1	HD 396-84
Perry Lk	KS Jefferson	Delaware R	F	521.9	920.6	891.5	25,342	12,202	PL 83-780
			FN	243.2	891.5	825.0	122	0	HD 642-81
Pipestem Dam & Res	ND Stutsman	Pipestem Cr	F	137.0	1,496.3	1,442.4	4,754	885	PL 89-298
			FRC	9.6	1,442.4	1,415.0	885	62	HD 266-89
Pomme De Terre Lk	MO Polk	Pomme De Terre R	F	407.2	874.0	839.0	15,980	7,890	PL 75-761
			FNPCAR	241.6	839.0	750.0	7,890	0	HD 549-81, PL 83-780
Pomona Lk	KS Osage	110 Mile Cr	F	176.8	1,003.0	974.0	8,520	400	PL 83-780
			FNMAR	70.6	974.0	912.0	4,000	0	HD 549-81
Rathbun Lk	IA Appanoose	Chariton R	F	346.3	926.0	904.0	20,948	11,013	PL 83-780
			FNM	205.4	904.0	844.0	11,013	0	HD 561-81
Smithville Lk	MO Clay	Little Platte R	F	101.8	876.2	864.2	9,995	7,192	PL 89-298
			FMCAR	144.6	864.2	799.0	7,192	0	HD 262-89
Spring Gulch Imbankment	CO Douglas	Spring Gulch	F	1.8	5,600.00	5,535.0	88	0	PL 81-516, HD 669-80
Stagecoach Lk & Dam 9	NE Lancaster	Hickman Br of Salt Cr	F	4.7	1,285.0	1,271.1	490	196	PL 85-500
			FRC	1.9	1,271.1	1,246.0	196	0	HD 396-84
Standing Bear Lk & Dam 16	NE Douglas	Trib Big Papillion Cr	F	3.7	1,121.0	1,104.0	302	137	PL 90-483
			FRC	1.5	1,104.0	1,080.0	137	0	HD 349-90
Stockton Lk	MO Cedar	Sac R	F	779.6	892.0	867.0	38,288	24,777	PL 83-780
			FARPN	887.1	867.0	760.0	24,777	0	HD 549-80
Tuttle Creek Lk	KS Riley	Big Blue R	F	1,937.4	1,136.0	1,075.0	54,179	14,875	PL 75-761
			FN	177.1	1,075.0	1,061.0	14,875	0	HD 842-76
Twin Lakes & Dam 13	NE Seward	Middle Cr Salt Cr	F	5.3	1,355.0	1,341.0	505	255	PL 85-500
			CFR	2.8	1,341.0	1,306.0	255	1	HD 396-84
Wagon Train Lk & Dam 8	NE Lancaster	Hickman Br of Salt Cr	F	0.9	1,302.0	1,287.8	680	303	PL 85-500
			FCR	2.5	1,287.8	1,260.0	303	4	HD 396-84
Wehrspann Lk & Dam 20	NE Sarpy	Trib South Branch Papio	F	6.1	1,113.1	1,096.0	493	246	PL 90-483
			FCAR	2.7	1,096.0	1,069.0	246	10	HD 349-90
Wilson Lk	KS Russell	Saline R	F	530.7	1,554.0	1,516.0	19,980	9,040	PL 78-534
			FRC	247.8	1,516.0	1,440.0	9,040	0	SD 191-78, SD 247-78
Yankee Hill Lk & Dam 10	NE Lancaster	Cardwell Br of Salt Cr	F	5.6	1,262.0	1,244.9	475	208	PL 85-500
			FCR	2.0	1,244.9	1,218.0	208	0	HD 396-84
North Atlantic Division									
Almond Lake	NY Steuben	Canacadea Cr	F	14.6	1,300.0	1,255.0	489	124	PL 74-738
Alvin R. Bush Dam	PA Clinton	Kettle Cr	F	73.4	937.0	840.0	1,430	160	FCA Sep 54
Arkport Dam	NY Steuben	Canisteo R	F	8.0	1,304.0	1,218.0	192	0	PL 74-738
Aylesworth Cr Lk	PA Lackawanna	Aylesworth Cr	F	1.7	1,150.0	1,108.0	87	7	PL 87-874
Beltzville Dam & Lk	PA Carbon, Monroe	Pohopoco Cr	F	27.0	651.0	628.0	1,411	947	PL 87-874
			FMA	39.8	628.0	537.0	947	113	
Bloomington Lk	MD Garret	North Branch Potomac R	F	36.2	1,500.0	1,466.0	1,184	952	PL 87-874
			FMA	92.0	1,466.0	1,255.0	952	42	
Blue Marsh Dam & Lk	PA Lebanon Berks	Tulpehocken CR	F	27.1	307.0	290.0	2,159	1,147	PL 87-874
			FMA	19.9	290.0	261.0	1,147	323	
Cowanesque Lk	PA Tioga	Cowanesque R	F	82.0	1,117.0	1,045.0	2,080	410	PL 85-500
Curwensville Lk	PA Clearfield	West Branch Susquehanna R	F	114.7	1,228.0	1,162.0	3,020	790	FCA Sep 54
East Sidney Lk	NY Delaware	Ouleout Cr	F	30.2	1,203.0	1,150.0	1,100	210	PL 74-738
Foster Joseph Sayers Dam	PA Centre	Bald Eagle Cr	F	70.2	657.0	630.0	3,450	1,730	FCA Sept 54
Francis E. Walter Dam & Res	PA Carbon, Luzerne, Monroe	Lehigh R	F	107.8	1,450.0	1,300.0	1,830	80	PL 79-526
Gathright Dam & Lk Moomaw	VA Alleghany, Bath	Jackson R	F	79.9	1,610.0	1,582.0	3,180	2,530	PL 79-526
			AR	80.7	1,582.0	1,554.0	2,530	1,780	
General Edgar Jadwin Dam	PA Wayne	Dyberry Cr	F	24.5	1,053.0	973.0	659	0	PL 80-858
Prompton Dam & Res	PA Wayne	W Br Lackawaxen R	F	48.5	1,205.0	1,125.0	910	290	PL 80-858
Raystown Lk	PA Huntingdon	Raystown Br	F	248.0	812.0	786.0	10,800	8,300	PL 87-874
			FR	514.0	786.0	622.8	8,300	150	
Stillwater Lk	PA Susquehanna	Lackawanna R	F	11.8	1,621.0	1,572.0	422	83	PL 77-228
Tioga-Hammond Lakes Hammond	PA Tioga	Crooked Cr	F	54.2	1,131.0	1,086.0	1,770	680	PL 85-500
Tioga-Hammond Lakes Tioga	PA Tioga	Tioga R	F	52.5	1,131.0	1,081.0	1,830	470	PL 85-500
Whitney Piont Lk	NY Broome	Otselic R	F	66.5	1,010.0	973.0	3,340	1,200	PL 74-738
York Indian Rock Dam	PA York	Codorus Cr	F	28.0	435.0	370.0	1,430	0	PL 74-738
North Central Division									
Baldhill Dam & Res	ND Barnes	Sheyenne R	FM	68.6	1,266.0	1,257.2	5,430	4,430	FCA Dec 44
Brandon Road L&D	IL Will	Illinois R	N	8.0	539.0	538.0	300	250	PL 71-126
Cedars L&D	WI Outagamie	Fox R	N	1.8	703.6	698.7	255	140	RHA of 1882, 1885
Coralville Dam & Res	IA Johnson	Iowa R	F	439.0	712.0	680.0	24,800	3,580	PL 75-761
			C	40.3	680.0	652.0	3,580	0	PL 75-761
Depree L&D	WI Brown	Fox R	N	9.4	591.0	586.7	926	0	PL 71-126
Dresden Island L&D	IL Grundy	Illinois R	N	1.0	505.0	504.0	1,680	1,550	FCA 1958
Eau Galle Dam & Res	WI Pierce	Eau Galle R	FCR	1.6	940.0	938.5	1,500	1,350	PL 78-534

Appendix E—List of Projects—Continued

Project name [1]	State/county	Stream [1]	Project purpose [2]	Storage 1,000 AF	Elev limits feet M.S.L.		Area in acres		Auth legis [3]
					Upper	Lower	Upper	Lower	
Farmdale Dam	IL Tazwell	Farm Cr	F	11.3	616.0	551.0	385	0	PL 78-534
Fondulac Dam	IL Tazwell	Fondulac Cr	F	2.3	579.0	530.0	97	0	PL 78-534
Gull Lk Dam & Res	MN Cass	Gull R	N	70.4	1,194.0	1,192.7	13,100	12,700	RHA 1899
Highway 75 Dam & Res	MN Bigstone, Lacqui, Parle	Minnesota R	FC	11.1	952.3	947.3	2,790	910	FCA Oct 65
Homme Dam & Res	ND Walsh	Park R	FM	3.7	1,080.0	1,074.0	190	178	FCA of 22 Dec 44
L&D 1	MN Hennepin, Ramsey	Mississippi R	N	13.0	725.1	722.8	5,800	5,500	RHA 1910
L&D 2	MN Dakota, Wash	Mississippi R	N	8.0	687.2	686.5	11,810	11,000	RHA 1927
L&D 3	MN Goodhue, Pierce	Mississippi R	N	17.8	675.0	674.0	17,950	17,650	RHA 1930
L&D 4	WI Wabasha, Buffalo	Mississippi R	N	18.0	667.0	666.5	38,820	36,800	RHA 1930
L&D 5	MN Winona, Buffalo	Mississippi R	N	6.2	660.0	659.5	12,680	12,000	RHA 1930
L&D 5A	MN Winona, Buffalo	Mississippi R	N	7.2	651.0	650.0	7,500	7,000	RHA 1930
L&D 6	MN Winona	Mississippi R	N	8.4	645.5	644.5	8,870	8,000	RHA 1930
L&D 7	MN Winona WI LaCrosse	Mississippi R	N	2.6	639.0	639.0	13,440	13,400	RHA 1930
L&D 8	MN Houston WI Vernon	Mississippi R	N	20.4	631.0	630.0	20,800	20,000	RHA 1930
L&D 9	WI Crawford IA Allamakee	Mississippi R	N	28.7	620.0	619.0	29,125	28,300	RHA 1930
L&D 10	IA Clayton WI Grant	Mississippi R	N	16.8	611.0	610.0	17,070	16,500	RHA 1930
L&D 11	IA Dubuque	Mississippi R	N	19.1	603.1	602.0	21,100	20,000	PL 71-520
L&D 12	IA Jackson	Mississippi R	N	12.2	592.1	591.0	13,000	12,400	PL 71-520
L&D 13	IL Whiteside	Mississippi R	N	24.2	583.1	582.0	30,000	28,500	PL 71-520
L&D 14	IA Scott	Mississippi R	N	9.0	572.1	571.0	10,500	9,980	PL 71-520
L&D 15	IL Rock Island	Mississippi R	N	5.5	561.1	559.0	3,725	3,540	PL 71-520
L&D 16	IL Rock Island	Mississippi R	N	12.1	545.1	544.0	13,000	12,400	PL 71-520
L&D 17	IL Mercer	Mississippi R	N	7.5	537.1	536.0	7,580	7,200	PL 71-520
L&D 18	IL Henderson	Mississippi R	N	11.0	529.1	528.0	13,300	12,600	PL 71-520
L&D 19	IA Lake	Mississippi R	N	55.0	518.2	517.2	33,500	31,800	PL 71-520
L&D 20	MO Lewis	Mississippi R	N	5.8	481.5	476.5	7,960	7,550	PL 71-520
L&D 21	IL Adams	Mississippi R	N	8.6	470.1	469.6	9,390	8,910	PL 71-520
L&D 22	MO Polke	Mississippi R	N	8.4	459.6	459.1	8,660	8,230	PL 71-520
Lac qui Parle Dam & Res	MN Chippewa Swift	Minnesota R	FC	119.3	941.1	931.2	13,500	6,400	FCA of 22 Jun 36
Lagrange L&D	IL Brown	Illinois R	N	0.0	429.0	429.0	10,500	10,500	PL 73-184
Leech Lake Dam & Res	MN Cass	Leech R	N	300.2	1,295.7	1,293.2	139,000	107,200	RHA of 1882 1895
Little Kaukauna L&D	WI Brown	Fox R	N	3.6	601.0	592.8	447	420	RHA of 1882 1885
Little Chute L&D	WI Outagamie	Fox R	N	0.4	694.2	688.9	74	67	RHA of 1882 1885
Lockport Lock	IL Will	Chicago San Ship Canal	FNP	2.7	579.0	577.5	1,850	1,800	RHA 1930
Lower Appleton L&D	WI Outagamie	Fox R	N	0.2	710.9	706.3	43	40	RHA of 1882 1895
Marseilles Lk & Dam	IL LaSalle	Illinois R	N	0.7	483.0	482.8	1,400	1,320	PL 71-126
Marsh Lake Dam & Res	MN Swift, Lacqui, Parle	Minnesota R	FC	23.9	941.1	937.6	8,650	5,150	FCA Jun 36
Menasha Dam Lk Winnebago	WI Winnebago	Fox R	FN	452.0	746.8	743.5	181,120	168,500	
Mount Morris Dam	NY Livingston	Genesee R	F	337.4	760.0	585.0	3,300	0	PL 74-738
O'Brien L&D	IL Cook	Calumet	N	0.3	581.9	578.2	50	50	RHA of 1946
Peoria L&D	IL Peoria	Illinois R	N	0.0	440.0	440.0	27,800	27,800	PL 73-184
Pine Dam & Res	MN Crow Wing	Pine R	N	40.4	1,230.3	1,227.3	13,900	13,000	RHA of 1899
Pokegama Dam & Res	MN Itasca	Mississippi R	N	52.4	1,274.4	1,270.3	13,700	12,000	RHA of 1899
Rapid Croche L&D	WI Outagamie	Fox R	N	3.4	608.5	602.1	568	0	RHA 1885
Red Lake Dam & Res	MN Clearwater	Red Lake R	FA	1,810.0	1,174.0	1,173.5	288,800	287,300	FCA Dec 44
Red Rock Dam & Res	IA Marion	Des Moines R	F	1,670.0	780.0	728.0	65,400	8,000	PL 75-761
			R	72.0	728.0	690.0	8,000	0	PL 75-761
Reservation Control Res	MN Traverse SD Roberts		FC	58.8	981.0	976.0	12,400	10,950	FCA 1936
Sandy Lake Dam & Res	MN Aitkin	Sandy R	N	37.5	1,218.3	1,214.3	10,600	8,200	RHA of 1899
Saylorville Dam & Res	IA Polk	Des Moines R	F	586.0	890.0	836.0	16,700	5,950	FCA 1936
			P	90.0	836.0	810.0	5,950	0	FCA
St Anthony Falls Lwr L&D	MN Hennepin	Mississippi R	N	0.0	750.0	750.0	50	50	RHA of 1937 1945
St Anthony Falls Upr L&D	MN Hennepin	Mississippi R	N	17.4	801.0	799.0	8,800	8,600	RHA of 1937 1945
Starved Rock L&D	IL LaSalle	Illinois R	N	1.0	459.0	458.0	1,155	1,020	PL 69-100
Upper Appleton L&D	WI Outagamie	Fox R	N	7.4	738.7	735.4	1,171	1,040	RHA of 1882 1885
Upper Kaukauna L&D	WI Outagamie	Fox R	N	1.1	656.8	652.8	134	115	RHA of 1882 1885
White Rock Dam & Res	MN Traverse SD Roberts	Bois De Sioux	FC	78.8	981.0	972.0	10,500	4,000	FCA 1936
Winnibigoshish Dam & Res	MN Cass Itasca	Mississippi R	N	98.7	1,300.9	1,296.9	98,700	62,000	RHA of 1899
New England Division									
Ball Mountain Lk	VT Windham	West R	F	52.4	1,017.0	830.5	810	20	PL 78-534, 83-780
Barre Falls Dam	MA Worcester	Ware R	F	24.0	807.0	761.0	1,400	0	PL 78-228
Birch Hill Dam	MA Worcester	Millers R	F	49.9	852.0	815.0	3,200	0	PL 75-761
Black Rock Lk	CT Litchfield	Branch Brook	F	8.5	520.0	437.0	190	21	PL 86-45
Blackwater Dam	NH Merrimack	Blackwater R	F	46.0	566.0	515.0	3,280	0	PL 75-111
Buffumville Lk	MA Worcester	Little R	F	11.3	524.0	492.5	530	200	PL 77-228
Colebrook River Lk	CT Litchfield MA Berkshire	West Branch Farmington R	F	50.2	761.0	708.0	1,185	750	PL 86-645
Conant Brook Dam	MA Hampden	Conant Brook	F	3.7	757.0	694.0	158	0	PL 86-645
East Brimfield Lk	MA Hampden, Worcester	Quinebaug R	F	29.9	653.0	632.0	2,300	360	PL 77-228
Edward MacDowell Lk	NH Hillsboro	Nubanusit Brook	F	12.8	946.0	911.0	840	165	PL 75-111
Everett Lk	NH Hillsboro, Merrimack	Piscataquog R	F	91.5	418.0	340.0	2,900	130	PL 75-761
Franklin Falls Dam	NH Belknap, Merrimack	Pemigewasset R	F	150.6	389.0	307.0	2,800	440	PL 75-111
Hancock Brook Lk	CT Litchfield	Hancock Brook	F	3.9	484.0	460.0	266	40	PL 86-645
Hodges Village Dam	MA Worcester	French R	F	13.3	501.0	465.5	740	0	PL 77-228
Hop Brook Lk	CT New Haven	Hop Brook	F	6.9	364.0	310.0	270	21	PL 86-645
Hopkinton Lk	NH Merrimack	Contoocook R	F	70.1	416.0	380.0	3,700	220	PL 75-761
Knightville Dam	MA Hampshire	Westfield R	F	49.0	610.0	480.0	960	0	PL 75-761
Littleville Lk	MA Hampden, Hampshire	Middle Br, Westfield R	F	23.0	576.0	518.0	510	275	PL 85-500
Mansfield Hollow Lk	CT Tolland	Natchaug R	F	49.2	257.0	205.5	1,880	200	PL 77-228
New Bedford-Fairhaven Hurr Barrier	MA Bristol		F	0.0	0.0	0.0	0	0	PL 85-500

APPENDIX E—LIST OF PROJECTS—Continued

Project name[3]	State/county	Stream[1]	Project purpose[1]	Storage 1,000 AF	Elev limits feet M.S.L.		Area in acres		Auth legis[1]
					Upper	Lower	Upper	Lower	
North Hartland Lk	VT Windsor	Ottauquechee R	F	69.8	546.5	425.0	1,100	215	PL 75-761.
North Springfield Lk	VT Windsor	Black R	F	50.0	545.5	467.0	1,200	100	PL 75-761
Northfield Br Lk	CT Litchfield	Northfield Br	F	2.4	576.0	500.0	87	7	PL 86-645
Otter Br Lk	NH Cheshire	Otter Brook	F	17.6	781.0	701.0	374	70	PL 83-780
Stamford Hurr Barrier	CT Fairfield		F	0.0	0.0	0.0	0	0	PL 86-645.
Surry Mountain Lk	NH Cheshire	Ashuelot R	F	31.7	550.0	500.0	970	260	PL 75-761.
Thomaston Dam	CT Litchfield	Naugatuck R	F	42.0	494.0	380.0	960	0	PL 78-534.
Townshend Lk	VT Windham	West R	F	32.9	553.0	478.0	735	95	PL 78-534, PL 83-780.
Tully Lk	MA Worcester	East Br Tully R	F	20.5	668.0	636.0	1,130	78	PL 75-761.
Union Village Dam	VT Orange	Ompompanoosuc R	F	38.0	584.0	420.0	740	0	PL 74-738.
West Hill Dam	MA Worcester	West R	F	12.4	264.0	234.0	1,025	0	PL 78-534
West Thompson	CT Windham	Quinebaug R	F	25.6	342.5	305.0	1,250	200	PL 86-645.
Westville Lake	MA Worcester	Quinebaug R	F	11.0	572.0	525.0	813	23	PL 77-228.
North Pacific Division									
Albeni Falls Dam, Lk Pend, Oreille	ID Bonner	Pend Oreille R	FNP	1,155.0	2,062.5	2,049.7	95,000	86,000	PL 81-516.
Applegate Lk	OR Jackson	Applegate R	FIR	75.2	1,987.0	1,854.0	988	221	FCA 1962, PL 87-8 PL 87-874.
Big Cliff Dam	OR Marion, Linn	N Santiam R	P	3.5	1,206.0	1,182.0	130	98	HD 544, PL 75-761 PL 87-874
Blue River Lk	OR Lane	Blue R	F	6.5	1,357.0	1,350.0	975	940	HD 531.
			FNI	78.8	1,350.0	1,180.0	940	133	PL 81-516.
Bonneville L&D Lk	WA Skamania	Columbia R	NP	136.0	77.0	70.0	20,800	19,850	RHA 1935.
Chena River Lakes	AK North Star Burough	Chena R	F	34.0	506.7	490.0	5,400	400	PL 90-483.
Chief Joseph Dam Rufus Woods Lk.	WA Douglas, Okanogan	Columbia R	P	192.3	956.0	930.0	8,400	6,800	HD 693, PL 79-525
Cottage Grove Lk	OR Lane	Coast Fk, Willamette R	F	29.8	791.0	750.0	1,155	295	HD 544, PL 75-761
Cougar Lk	OR Lane	South Fk	F	11.3	1,699.0	1,690.0	1,260	1,235	HD 531
			FNPI	143.9	1,690.0	1,532.0	1,235	835	PL 81-516
			P	9.9	1,532.0	1,516.0	835	802	PL 83-870
Detroit Lk	OR Marion	North Santiam	F	19.1	1,569.0	1,563.0	3,490	3,455	HD 544, PL 75-761
			FNPI	281.6	1,563.5	1,450.0	3,455	1,725	
			P	40.3	1,450.0	1,425.0	1,725	1,415	
Dexter Dam	OR Lane	Middle Fk, Willamette R	FNPI	4.8	695.0	690.0	990	940	HD 544, PL 75-761
Dorena Lk	OR Lane	Cow R	F	5.5	835.0	832.0	1,885	1,815	HD 544
			FNI	65.0	832.0	770.5	1,815	520	PL 75-761.
Dworshak Dam and Res	ID Clearwater	North Fk, Clearwater R	FNP	2,016.0	1,600.0	1,445.0	17,090	9,050	HD 403, PL 87-874
Fall Cr Dam and Lk	OR Lane	Fall Cr	F	7.5	834.0	830.0	1,865	1,780	HD 531
			FNI	107.5	830.0	728.0	1,780	460	PL 81-516
Fern Ridge Lk	OR Lane	Long Tom R	F	15.7	375.1	373.5	10,305	9,340	HD 544
			FNI	93.9	373.5	353.0	9,340	1,515	PL 75-761
Foster Lake	OR Linn	South Santiam R	F	4.9	641.0	637.0	1,280	1,195	HD 544
			FNPI	24.9	637.0	613.0	1,195	895	PL 86-645
Green Peter Lk	OR Linn	Middle Fk, Santiam R	F	18.3	1,015.0	1,010.0	3,705	3,605	HD 531
			FNPI	249.9	1,010.0	992.0	3,605	2,072	PL 81-516, PL 83-780
Hills Creek Lk	OR Lane	Middle Fk, Willamette R	F	5.6	1,543.0	1,541.0	2,850	2,710	HD 531
			FNPI	194.6	1,541.0	1,448.0	2,710	1,575	PL 81-516
Howard Hanson Dam	WA King	Green R	F	80.0	1,206.0	1,141.0	1,750	763	HD 531
			FA	25.6	1,141.0	1,040.0	763	13	PL 81-516
Ice Harbor Dam Lk Sacajawea	WA Walla, Walla, Franklin	Snake R	NP	24.9	440.0	437.0	8,370	8,210	HD 704, PL 79-14
John Day Dam Lk Umatilla	OR Sherman	Columbia R	F	158.0	268.0	265.0	55,000	52,000	HD 531
			FNP	150.0	265.0	262.0	52,000	49,000	PL 81-516
			F	192.0	262.0	257.0	49,000	42,000	
Libby Dam Lk Koocanusa	MT Lincoln	Kootenai R	FP	4,979.5	2,459.0	2,287.0	46,365	14,391	HD 531, PL 81-516
Little Goose L&D Lk Bryan	WA Columbia, Whitman	Snake R	PN	49.0	638.0	633.0	10,030	9,620	HD 704, PL 79-14
Lookout Point Lk	OR Lane	Middle Fk, Willamette R	P	12.2	825.0	819.0	2,090	1,860	HD 544
			FNPI	324.2	926.0	825.0	4,255	2,090	PL 75-761
Lost Creek Lk	OR Jackson	Rogue R	FPIR	315.0	1,872.0	1,751.0	3,430	1,800	HD 566, PL 87-874
Lower Granite L&D	WA Garfield, Whitman	Snake R	NPI	43.6	738.0	733.0	8,900	8,540	HD 704, PL 79-14
Lucky Peak Dam and Lk	ID Ada	Boise R	F	13.9	3,060.0	3,055.0	2,817	2,745	PL 79-526
			FI	264.4	3,055.0	2,905.0	2,817	802	
Lwr Monumental L&D Lk HG West	WA Walla, Walla, Franklin	Snake R	NP	20.0	540.0	537.0	6,700	6,550	HD 704, PL 79-14
McNary L&D, Dam Lk Wallula	WA Benton OR Umatilla	Columbia R	NP	185.0	340.0	335.0	38,800	36,000	HD 704, PL 79-14
Mill Creek Dam Lk	WA Walla, Walla	Mill Cr	F	7.5	1,265.0	1,205.0	225	53	HD 578, PL 75-761
Mud Mountain Dam	WA King, Pierce	White R	F	106.3	1,215.0	895.0	963	0	PL 74-738
The Dalles L&D Lk Celilo	WA Klickitat OR Wasco	Columbia R	NP	52.5	160.0	155.0	11,200	10,350	HD 531, PL 81-516
Willow Creek Lk	OR Morrow	Willow Cr	F	11.6	2,113.5	2,047.0	269	96	PL 89-298
Wynoochee Dam and Lk	WA Grays, Harbor	Wynoochee R	FMCA	65.4	800.0	700.0	1,170	193	HD 601, PL 93-251
Ohio River Division									
Allegheny L&D 2	PA Allegheny	Allegheny R	N	0.0	721.0	710.0	0	0	RHA 1935
Allegheny L&D 3	PA Allegheny	Allegheny R	N	0.0	734.5	721.0	0	0	RHA 1935
Allegheny L&D 4	PA Allegheny Westmoreland	Allegheny R	N	0.0	745.0	734.5	0	0	RHA 1912
Allegheny L&D 5	PA Armstrong	Allegheny R	N	0.0	756.8	745.0	0	0	RHA 1912
Allegheny L&D 6	PA Armstrong	Allegheny R	N	0.0	769.0	756.8	0	0	RHA 1912
Allegheny L&D 7	PA Armstrong	Allegheny R	N	0.0	782.1	769.0	0	0	RHA 1912
Allegheny L&D 8	PA Armstrong	Allegheny R	N	0.0	800.0	782.1	0	0	RHA 1912, 1935
Allegheny L&D 9	PA Armstrong	Allegheny R	N	0.0	822.0	800.0	0	0	RHA 1935
Allegheny Res Kinzua Dam	PA Warren	Allegheny R	F	607.0	1,365.0	1,328.0	21,180	12,080	PL 74-738
			FPCAR	549.0	1,328.0	1,240.0	12,080	1,900	
Alum Cr Lk	OH Delaware	Alum Cr	F	53.1	901.0	888.0	4,852	3,387	PL 87-874
			FMCR	79.2	888.0	865.0	3,387	3,105	
Atwood Lk	OH Tuscarawas	Indian Fk Cr	F	26.1	941.0	928.0	2,460	1,540	PW 1933

APPENDIX E—LIST OF PROJECTS—Continued

Project name [1]	State/county	Stream [1]	Project purpose [2]	Storage 1,000 AF	Elev limits feet M.S.L.		Area in acres		Auth legis [3]
					Upper	Lower	Upper	Lower	
Barkley Dam Lk Barkley	Ky Lyon, Livgst	Cumberland R	FCR	7.0	928.0	922.5	1,540	1,250	
			F	1,213.0	375.0	359.0	93,430	57,920	PL 79-525.
			FP	259.0	359.0	354.0	57,920	45,210	
			N	610.0	354.0	233.0	45,210	0	
Barren River Lk	KY Allen, Barren	Barren R	F	558.8	590.0	552.0	20,150	10,000	PL 75-261.
			FMR	190.3	552.0	525.0	10,000	4,340	
Beach City Lk	OH Tuscarawas	Sugar Cr	F	69.9	976.5	948.0	6,150	420	PW 1933.
			FCR	0.0	0.0	0.0	0	420	
Beech Fk Lk	WV Wayne	Beech Fk Cr	F	28.3	614.5	592.0	1,847	725	PL 87-874.
			FCR	5.0	592.0	583.5	725	460	
Belleville L&D	WV Wood OH Meigs	Ohio R	N	0.0	582.0	560.0	0	0	RHA 1909.
Berlin Lk	OH Mahoning, Portage	Mahoning R	F	38.3	1,032.0	1,024.7	5,500	3,590	PL 75-761.
			FMCAR	56.6	1,024.7	1,016.5	3,590	2,200	
Bluestone Lk	WV Summers	New R	F	592.6	1,520.0	1,410.0	9,180	2,040	PL 74-738.
			FCR	7.5	1,410.0	1,406.0	2,040	1,800	PL 75-761
Bolivar Dam	OH Stark, Tuscarawas	Sandy Cr	F	149.6	982.0	895.0	6,500	0	PW 1933.
Brookville Lk	IN Franklin	E Fork of Whitewater R	FMR	128.4	748.0	713.0	5,260	2,430	PL 75-761
Buckhorn Lk	KY Leslie	Middle Fk of Kentucky R	F	135.8	840.0	782.0	3,610	1,230	PL 75-761
			FR	21.8	782.0	757.0	1,230	550	
Burnsville Lk	WV Braxton	L Kanawha R	F	51.5	825.0	789.0	1,902	965	PL 75-761.
			FCA-	10.2	789.0	776.0	965	553	
CJ Brown Dam & Res	OH Clark	Buck Cr	F	26.8	1,023.0	1,012.0	2,720	2,120	PL 87-874.
CM Harden Lk	IN Parke	Raccoon Cr	F	83.5	690.0	661.0	3,910	2,060	PL 75-761
			FAR	33.1	661.0	640.0	2,060	1,100	
Caesar Cr Lk	OH Warren	Caesar Cr	F	140.2	883.0	849.0	6,110	2,830	PL 75-761
			FMAR	88.7	849.0	800.0	2,830	700	
Cagles Mill Lk	IN Putman	Mill Cr	F	201.0	704.0	636.0	4,840	1,400	PL 75-761.
Cannelton L&D	KY Hancock IN Perry	Ohio R	N	0.0	383.0	358.0	0	0	RHA 1909
Carr Fk Lk	KY Knott	Carr Cr	F	25.1	1,055.0	1027.0	1,120	710	PL 87-874
			FAR	10.8	1,027.0	1009.0	710	530	
Cave Run Lk	KY Rowan	Licking R	F	391.5	765.0	730.0	14,870	8,270	PL 74-738
			FAR	75.3	730.0	720.0	8,270	6,790	
Center Hill Lk	TN Dekalb	Caney FK	F	762.0	685.0	648.0	23,060	18,220	PL 75-761
			P	492.0	648.0	618.0	18,220	14,590	
Charles Mill Lk	OH Ashland	Black Fk	F	80.6	1,020.0	997.0	6,050	1,350	PW 1933
			FCR	4.5	997.0	993.0	1,350	827	
Cheatham L&D	TN Cheatham	Cumberland R	P	19.8	385.0	382.0	7,450	5,630	RHA 1946, PL 396
			N	84.2	382.0	345.0	5,630	0	PL 396
Clendening Lk	OH Harrison	Brush Fk	F	27.5	910.5	898.0	2,620	1,800	PW 1933
			FCR	8.0	898.0	893.0	1,800	1,430	
Conemaugh River Lk	PA Indiana, Westmoreland	Conemaugh R	F	270.0	975.0	880.0	6,820	300	PL 74-738, PL 75-761.
Cordell Hull Dam & Res	TN Smith	Cumberland R	PR	17.8	504.5	499.0	12,200	9,820	RHA 1946
			NR	0.0	499.0	424.0	9,820	0	
Crooked Cr Lk	PA Armstrong	Crooked Cr	F	89.4	920.0	840.0	1,940	350	PL 74-738, PL 75-761
Dale Hollow Lk	TN Clay	Obey R	F	353.0	663.0	651.0	30,990	27,700	PL 75-761
			P	496.0	651.0	631.0	27,700	21,880	
Dashields L&D	PA Allegheny	Ohio R	N	0.0	692.0	682.0	0	0	RHA 1909
Deer Cr Lk	OH Pickaway	Deer Cr	F	91.5	844.0	810.0	4,046	1,277	PL 75-761
			FCR	14.6	810.0	796.0	1,277	727	
Delaware Lk	OH Delaware	Olentangy R	F	118.0	947.0	915.0	8,550	1,270	PL 75-761
			FCAR	5.6	915.0	910.0	1,270	950	
Dewey Lk	KY Floyd	Johns Cr	F	76.1	686.0	650.0	3,340	1,100	PL 75-761
			FCR	4.9	650.0	645.0	1,100	880	
Dillon Lk	OH Muskingum	Licking R	F	256.5	790.0	737.0	10,280	1,560	PL 75-761
			FCR	4.4	737.0	734.0	1,560	1,330	
Dover Dam	OH Tuscarawas	Tuscarawas R	F	203.0	916.0	858.0	10,100	0	PW 1933
E Br Clarion River Lake	PA Elk	E Br Clarion R	F	19.0	1,685.0	1,670.0	1,370	1,160	PL 78-526
			FCAR	19.8	1,670.0	1,651.0	1,160	920	
E Fk Res Wm H Harsha Lk	OH Clermont	E Fk Little Miami R	F	202.2	795.0	733.0	4,600	2,160	PL 75-761
			FMCAR	73.6	733.0	683.0	2,160	820	
East Lynn Lk	WV Wayne	E Fk Twelvepole	F	65.3	701.0	662.0	2,351	1,005	PL 75-761
			FCR	5.5	662.0	656.0	1,005	823	
Emsworth L&D	PA Allegheny	Ohio R	N	0.0	710.0	692.0	0	0	RHA 1909
Fishtrap Lk	KY Pike	Levisa Fk	F	126.7	825.0	757.0	2,681	1,131	PL 75-761
			FCAR	27.2	757.0	725.0	1,131	569	
Gallipolis L&D	WV Mason OH Gallia	Ohio R	N	0.0	538.0	515.0	0	0	RHA 1935
Grayson Lk	KY Carter	L Sandy R	F	89.6	681.0	645.0	3,633	1,509	PL 86-645
			FCAR	10.7	645.0	637.0	1,509	1,159	
Green R L&D 1	KY Henderson	Green R	N	0.0	349.1	337.3	0	0	RHA 1888
Green R L&D 2	KY McLean	Green R	N	0.0	363.4	349.1	0	0	RHA 1888
Green River Lk	KY Taylor	Green R	F	479.1	713.0	675.0	19,100	8,210	PL 75-761
			FAR	81.5	675.0	664.0	8,210	6,650	
Greenup L&D 3	KY Greenup OH Scioto	Ohio R	N	0.0	515.0	485.0	0	0	RHA 1909
Hannibal L&D	WV Wetzel OH Monroe	Ohio R	N	0.0	623.0	602.0	0	0	RHA 1909
Hildebrand L&D	WV Monongalia	Monongahela	N	0.0	835.0	814.0	0	0	RHA 1950
Huntington Lk	IN Hunt	Wabash R	F	140.6	798.0	749.0	7,900	900	PL 85-500.
			FR	8.4	749.0	737.0	900	500	
J Percy Priest Dam & Res	TN Davidson	Stones R	F	252.0	504.5	490.5	22,720	14,400	PL 75-761.
			FP	15.0	490.5	489.5	14,400	14,000	
			FPR	0.0	489.5	483.0	14,000	11,630	
			PR	0.0	483.0	480.0	11,630	10,570	
JW Flannagan Dam & Res	VA Dickenson	Pound R	F	78.6	1,446.0	1,396.0	2,098	1,143	PL 75-761

APPENDIX E—LIST OF PROJECTS—Continued

Project name [1]	State/county	Stream [1]	Project purpose [2]	Storage 1,000 AF	Elev limits feet M.S.L.		Area in acres		Auth legis [3]
					Upper	Lower	Upper	Lower	
			FMCR	16.5	1,398.0	1,380.0	1,143	310	
Kentucky R L&D 1	KY Carroll	Kentucky R	N	0.0	430.0	421.8	0	0	RHA 1879
Kentucky R L&D 2	KY Henry Owen	Kentucky R	N	0.0	444.0	430.0	0	0	RHA 1879
Kentucky R L&D 3	KY Henry Owen	Kentucky R	N	0.0	457.1	444.0	0	0	RHA 1879
Kentucky R L&D 4	KY Franklin	Kentucky R	N	0.0	470.4	457.1	0	0	RHA 1879
Laurel River Lk	KY Laurel, Whitley	Laurel R	P	185.0	1,018.5	982.0	6,060	4,200	PL 86-645
			R	250.6	982.0	780.0	4,200	0	
Leesville Lake	OH Carroll	McGuire Cr.	F	17.9	977.5	963.0	1,470	1,000	PW 1933
			FCR	5.5	963.0	957.0	1,000	829	
London L&D	WV Kanawha	Kanawha R	N	0.0	614.0	590.0	0	0	RHA 1930
Loyalhanna Lk	PA Westmoreland	Loyalhanna Cr	F	93.3	975.0	910.0	3,280	210	PL 74-738
			FC	0.0	0.0	0.0	0	0	PL 75-761
M J Kirwan Dam & Res	OH Portage	W. Br Mahoning R	F	22.0	993.0	985.5	3,240	2,650	PL-74-738
			FCAR	52.9	985.5	951.0	2,650	570	PL 75-761
Mahoning Cr Lk	PA Armstrong	Mahoning Cr	F	64.7	1,162.0	1,098.0	2,370	280	PL 74-738
			FRC	5.1	1,098.0	1,075.0	280	170	PL 75-761
Markland L&D	IN Switzerland KY Gallatin	Ohio R	N	0.0	455.0	420.0	0	0	RHA 1909
Marmet L&D	WV Kanawha R.	Kanawha	N	0.0	590.0	566.0	0	0	RHA 1930
Martins Fk Lk	KY Harlan	Martins Fk of Clover R	F	14.3	1,341.0	1,310.0	578	340	PL 89-298
			FAR	3.1	1,310.0	1,300.0	340	274	
			R	3.7	1,300.0	1,265.0	274	0	
Maxwell L&D	PA Fayette Washington	Monongahela R	N	0.0	763.0	743.5	0	0	RHA 1909
McAlpine L&D	KY Jefferson IN Clark	Ohio R	N	0.0	420.0	383.0	0	0	RHA 1909
Meldahl L&D	KY Bracken OH Clermont	Ohio R	N	0.0	485.0	455.0	0	0	RHA 1909
Mississinewa Lk	IN Miami	Mississinewa R	F	293.2	779.0	737.0	12,830	3,180	PL 85-500
			FR	51.9	737.0	712.0	3,180	1,280	
Mohawk Dam	OH Coshocton	Walhonding R	F	285.0	890.0	799.2	7,950	0	PW 1933
Mohicanville Dam	OH Ashland	Lk Fork	F	102.0	963.0	932.0	6,800	0	PW 1933
Monongahela R L&D 2	PA Allegheny	Monongahela R	N	0.0	718.7	710.0	0	0	RHA 1902
Monongahela R L&D 3	PA Allegheny	Monongahela R	N	0.0	726.9	718.7	0	0	RHA 1905
Monongahela R L&R 4	PA Washington Westmoreland.	Monongahela R	N	0.0	743.5	726.9	0	0	RHA 1909
Monongahela R L&D 7	PA Greene, Fayette	Monongahela R	N	0.0	778.0	763.0	0	0	RHA 1922
Monongahela R L&D 8	PA Greene, Fayette	Monongahela R	N	0.0	787.0	778.0	0	0	RHA 1922, 1950, 1973
Monroe Lk	IN Monroe	Salt Cr	F	258.8	556.0	538.0	18,450	10,750	FCA 1958
			FMA	159.9	538.0	515.0	10,750	3,280	
Montgomery Island L&D	PA Beaver	Ohio R	N	0.0	682.0	664.5	0	0	RHA 1909
Morgantown L&D	WV Monongalia Monongahela R.	N	0.0	814.0	797.0	0	0	RHA 1909	
Mosquito Cr Lk	OH Trumbull	Mosquito Cr	F	21.7	904.0	901.4	8,900	7,850	PL 75-761
			FMCAR	80.4	901.4	899.9	7,850	7,220	
N Br Kokosing River Lk	OH Knox	North Br of Kokosing R	F	13.9	1,146.0	1,121.0	1,140	154	PL 87-874
N Fk Pound Lk	VA Wise	N Fk Pound R	F	8.0	1,644.0	1,611.0	349	154	PL 86-645
			FMCR	1.3	1,611.0	1,601.0	154	[illegible]	
New Cumberland L&D	WV Hancock OH Jefferson	Ohio R	N	0.0	664.5	644.0	0	0	RHA 1909
Newburgh L&D	KY Henderson IN Warrick	Ohio R	N	0.0	358.0	342.0	0	0	RHA 1909
Nolin Lk	KY Edmonson	Nolin R	F	439.2	560.0	515.0	14,530	5,790	PL 75-761
			FR	106.4	515.0	490.0	5,790	2,890	
Ohio R L&D 52	KY McCracken IL Massac	Ohio R	N	0.0	302.0	290.0	0	0	RHA 1909, 1910, 1918
Ohio R L&D 53	KY Ballard IL Pulaski	Ohio R	N	0.0	290.0	276.6	0	0	RHA 1909, 1910, 1918
Old Hickory L&D	TN Davidson Sumner	Cumberland R	P	63.0	445.0	442.0	22,500	19,550	RHA 1946
			N	357.0	442.0	375.0	19,550	0	
Opekiska L&D	WV Monongahela	Monongahela R	N	0.0	857.0	835.0	0	0	RHA 1950
Paint Cr Lk	OH Ross, Highland	Paint Cr	F	124.7	845.0	798.0	4,761	1,190	PL 75-761
			FMCAR	11.4	798.0	787.5	1,190	770	
Paintsville Lk	KY Johnson	Paint Cr	F	32.8	731.0	709.0	1,867	1,139	PL 89-298
			FCAR	36.3	709.0	650.0	1,139	261	
Patoka Lk	IN DuBois	Patoka R	F	121.1	548.0	536.0	11,300	8,880	PL 89-298
			FMCAR	167.3	536.0	508.0	8,880	2,010	
Piedmont Lk	OH Harrison	Stillwater Cr	F	32.2	924.6	913.0	3,170	2,310	PW 1933
			FCR	8.8	913.0	909.0	2,310	1,987	
Pike Island L&D	WV Ohio OH Belmont	Ohio R	N	0.0	844.0	823.0	0	0	RHA 1909
Pleasant Hill Lk	OH Ashland	Clear Fk	F	74.2	1,085.0	1,020.0	2,800	850	PW 1933
			FCR	5.5	1,020.0	1,012.5	850	627	
R D Bailey Lk	WV Mingo, Wyoming	Guyandot R	F	169.5	1,155.0	1,035.0	2,850	630	PL 87-874
			FCAR	12.[illegible]	1,035.0	1,012.0	630	440	
Racine L&D	WV Mason OH Meigs	Ohio R	N	0.0	560.0	538.0	0	0	RHA 1909
Rough River Lk	Grayson, Breckinridge Ridge	Rough R	F	214.4	524.0	495.0	10,260	5,100	PL 75-761
			FMR	90.2	495.0	470.0	5,100	2,180	
Salamonie Lk	IN Wabash	Salamonie R	F	202.9	793.0	755.0	9,340	2,880	PL 85-500
			FR	47.6	755.0	730.0	2,880	976	
Senecaville Lk	OH Guernsey	Seneca Fk	F	45.1	842.5	832.2	5,170	3,550	PW 1933
			FCR	12.8	832.2	828.2	3,550	2,912	
Shenango River Lk	PA Mercer	Shenango R	F	151.0	919.0	896.0	11,090	3,560	PL 75-761
			FCAR	29.9	896.0	885.0	3,560	1,910	
Smithland L&D	KY Livingston IL Pope	Ohio R	N	0.0	324.0	302.0	0	0	RHA 1909

APPENDIX E—LIST OF PROJECTS—Continued

Project name [1]	State/county	Stream [1]	Project purpose [2]	Storage 1,000 AF	Elev limits feet M.S.L.		Area in acres		Auth legis [3]
					Upper	Lower	Upper	Lower	
Summersville Lk	WV Nicholas	Gauley R	F	221.9	1,710.0	1,1652.0	4,913	2,790	PL 75-761.
			FRCA	161.8	1,652.0	1,535.0	2,790	514	
Sutton Lk	WV Braxton	Elk R	FCAR	60.0	925.0	850.0	1,520	270	PL 75-761.
Tappan Lk	OH Harrison	L Stillwater Cr	F	26.5	909.0	899.3	3,100	2,350	PW 1933.
			FCR	11.4	899.3	894.0	2,350	1,960	
Tionesta Lk	PA Forest	Tionesta Cr	F	125.6	1,170.0	1,085.0	2,770	480	PL 74-738. PL 75-761.
Tom Jenkins Dam, Burr Oak, Lk	OH Athens	E Br Sandy Cr	F	17.6	740.0	721.0	1,192	664	FCA 1944.
			FRM	5.8	721.0	710.0	664	394	PL 78-534.
Tygart Lake	WV Taylor	Tygart R	F	178.1	1,167.0	1,094.0	3,430	1,740	PWA 1934.
			FMACR	99.9	1,094.0	1,010.0	1,740	620	
Union City Res	PA Erie	French Cr	F	47.6	1,278.0	1,210.0	2,280	0	PL 87-874.
Uniontown L&D	KY Union IN Posey	Ohio R	N	0.0	342.0	324.0	0	0	RHA 1909
W FK of Mill Cr Winton Woods Lk	OH Hamilton	W Fk Mill Cr	F	9.8	702.0	675.0	567	183	PL 79-526
Willow Island L&D	WV Pleasants OH Washington	Ohio R	N	0.0	602.0	582.0	0	0	RHA 1909.
Wills Cr Lk	OH Coshocton Wills Cr, Muskingum		F	190.0	779.0	742.0	11,450	900	PW 1933.
			OR	0.0	0.0	0.0	0	0	
Winfield L&D	WV Putnam	Kanawha R	N	0.0	566.0	538.0	0	0	RHA 1935.
Wolf Cr Dam, Lk Cumberland	KY Russell	Cumberland R	P	2,142.0	723.0	673.0	50,250	35,820	
			F	2,094.0	760.0	723.0	63,530	50,250	PL 75-761.
Woodcock Cr Lk	PA Crawford	Woodcock Cr	F	15.0	1,209.0	1,181.0	775	325	FCA 1962.
			FCAR	5.0	1,181.0	1,162.5	325	100	
Youghiogheny R Lk	PA Fayette	Youghiogheny R	F	99.5	1,470.0	1,439.0	3,570	2,840	FCA 1938.
			FCAR	149.3	1,439.0	1,419.0	2,840	2,300	
South Atlantic Division									
Aberdeen L&D and Res	MS Monroe	Tombigbee R	N	3.9	190.5	189.5	4,359	3,883	PL 79-525.
Aliceville Lock Dam & Res	AL Pickens	Tombigbee R	N	7.6	136.5	135.5	8,655	7,945	PL 79-525.
Allatoona Dam & Res	GA Bartow	Etowah R	F	302.6	860.0	840.0	19,201	11,862	PL 77-228.
			PMAR	284.6	840.0	800.0	11,862	3,251	
B Everett Jordan Dam & Lk	NC Chatham	Haw R	F	538.4	240.0	216.0	31,811	13,942	PL 88-253.
			FMCAR	140.4	216.0	202.0	13,942	[illegible]	
Bay Springs Lock Dam & Res	MS Tishomingo	Tombigbee R	N	37.0	414.0	408.0	6,700	5,740	PL 79-525.
Buford Dam Lk, Sidney Lanier	GA Forsyth, Gwinnett	Chattahoochee R	F	598.8	1,085.0	1,071.0	47,182	38,542	PL 79-14.
			PNMR	1,087.6	1,071.0	1,035.0	38,542	22,442	
Carters Dam & Res	GA Murray	Coosawattee R	F	89.2	1,099.0	1,074.0	3,880	3,275	PL 79-14.
			PRA	41.4	1,074.0	1,022.0	3,275	2,196	
Claiborne Lock Dam & Res	AL Monroe	Alabama R	N	16.6	35.0	32.0	5,930	5,210	PL 79-14.
Clarks Hill Dam & Lk	GA Columbia	Savannah R	F	390.0	335.0	330.0	78,500	71,100	PL 78-534.
	SC McCormick		FP	1,045.0	330.0	312.0	71,100	45,000	
Coffeeville Lock Dam & Res	AL Clark, Choctaw	Tombigbee R	N	19.9	32.5	30.0	8,500	7,500	PL 80-317.
Columbus Lock Dam & Res	MS Lowndes	Tombigbee R	N	8.5	163.5	162.5	9,400	8,500	PL 79-525.
Demopolis Lock Dam & Res	AL Sumter, Marengo	Tombigbee R	N	0.0	73.0	73.0	10,000	10,000	PL 80-317.
Falls Dam & Lk	NC Wake	Neuse R	F	220.9	264.0	250.1	20,810	11,310	PL 89-298.
			FMCAR	89.7	250.1	236.5	11,310	2,600	
G W Andrews L&D and Res	AL Houston GA Early	Chattahoochee R	N	8.2	102.0	96.0	1,540	1,190	PL 79-14.
Gainesville L&D and Res	AL Sumter, Greene	Tombigbee R	N	5.8	109.5	108.5	6,920	5,900	PL 79-525.
Hartwell Dam & Lk	GA Hart	Savannah R	F	293.0	665.0	660.0	61,400	55,950	PL 81-516.
	SC Anderson		FP	1,416.0	660.0	625.0	55,950	27,650	
Holt Lock Dam & Res	AL Tuscaloosa	Black-Warrior R	NP	3.3	187.0	186.0	3,298	3,252	PL 80-317.
Inglis Dam Lk Rousseau	FL Levy, Marion, Citrus	Cross FL Barge Canal	N	13.0	27.5	24.0	4,030	2,040	PL 77-675.
Jim Woodruf L&D	FL Gadsden, Jackson	Apalachicola R	NP	20.0	77.5	76.5	38,850	36,000	PL 79-14.
John H Kerr Dam & Res	VA Mecklenburg	Roanoke R	F	1,261.4	320.0	300.0	83,200	48,900	PL 78-534.
			FP	1,027.0	300.0	268.0	48,900	19,700	
John Hollis Bankhead L&D and Res.	AL Tuscaloosa	Black-Warrior R	NP	27.1	255.0	252.0	9,245	8,730	PL 80-168.
Lk Okeechobee	FL Okeechobee, Glades, Hendry, Palm Beach, Martin.	Central and Southern FL	FNMC	2,850.0	17.5	10.5	454,800	326,000	PL 71-520, PL 75-392, PL 79-14, PL 80-858, PL 83-780, PL 90.
Lock A	MS Monroe	Tombigbee R	N	0.9	220.5	219.5	960	850	PL 79-525.
Lock B	MS Monroe	Tombigbee R	N	2.7	245.5	244.5	2,841	2,615	PL 79-525.
Lock C	MS Itawamba	Tombigbee R	N	1.8	270.5	269.5	1,699	1,586	PL 79-525.
Lock D	MS Itawamba	Tombigbee R	N	2.0	300.5	299.5	2,021	1,959	PL 79-525.
Lock E	MS Itawamba, Prentiss	Tombigbee R	N	0.9	330.5	329.5	889	821	PL 79-525.
Millers Ferry L&D	AL Wilcox	Alabama R	NP	16.7	80.0	79.0	17,201	16,160	PL 79-14.
Okatibbee Dam & Res	MS Lauderdale	Okatibbee Cr	F	46.5	352.0	343.0	6,580	3,800	PL 87-874.
		Chickasawhay R	RMA	34.3	343.0	328.0	3,800	1,275	
Philpott Dam & Lk	VA Henry	Smith R	F	34.2	985.0	974.0	3,370	2,880	PL 78-534.
			FP	111.2	974.0	920.0	2,880	1,350	
R B Russell Dam and Lk	GA Elbert	Savannah R	F	140.0	480.0	475.0	29,340	26,653	PL 89-789.
	SC Abbeville		FP	126.8	475.0	470.0	26,653	24,117	
Robert F Henry Lock Dam & Res	AL Autauga, Lowndes	Alabama R	NP	44.6	125.0	124.0	13,300	10,470	PL 79-14.
Rodman Dam & Lk Ocklawaha	FL Putman & Marion	Cross FL Barge Canal	N	48.0	23.2	20.0	17,350	12,950	PL 77-675.
S-10 & Water Cons Area 1	FL Palm Beach	Central and Southern FL	F	181.9	18.3	17.0	141,250	141,250	PL 80-858.
			FIMC	273.2	17.0	14.0	141,250	26,00	
S-11 & Water Cons Area 2A	FL Palm Beach Broward	Central and Southern FL	F	238.3	16.6	14.5	110,500	110,500	PL 80-858.
			FIMC	165.0	14.5	13.0	110,500	107,500	PL 83-780.
S-12 & Water Cons Area 3A	FL Broward & Dade	Central and Southern FL	F	1,661.0	14.5	10.5	487,200	385,000	PL 80-858.
			FIMC	465.0	10.5	9.5	385,000	316,000	PL 83-780.
Selden Lock and Res	AL Hale, Greene	Black-Warrior R	N	9.1	95.5	94.0	8,200	6,900	PL 80-317.
W Kerr Scott Dam & Res	NC Wilkes	Yadkin R	F	112.0	1,075.0	1,030.0	4,000	1,475	PL 79-526.
			FM	33.0	1,030.0	1,000.0	1,475	675	
Walter F George L&D	GA Clay	Chattahoochee R	NP	244.0	190.0	184.0	45,181	38,375	PL 81-516.

APPENDIX E—LIST OF PROJECTS—Continued

Project name [1]	State/county	Stream [1]	Project purpose [2]	Storage 1,000 AF	Elev limits feet M.S.L.		Area in acres		Auth legs [1]
					Upper	Lower	Upper	Lower	
	AL Henry								
West Point Dam & Res	GA Troup	Chattahoochee R	NPMAR	306.1	635.0	620.0	25,864	15,512	PL 87-874.
William Bacon Oliver L&D and Res	AL Tuscaloosa	Black Warrior R	N	0	122.9	122.9	790	790	PL 60-317.
			South Pacific Division						
Alamo Dam & Lk	AZ Mohave, Yuma	Bill Williams R	F	1,046.2	1,235.0	1,174.0	13,307	7,046	PL 78-534.
Bear Dam	CA Mariposa	Bear Cr	F	7.7	413.5	344.0	286	0	PL 78-534.
Black Butte Lk	CA Tehama	Stony Cr	FI	137.1	473.5	414.6	4,453	577	PL 78-534.
Brea Dam & Res	CA Orange	Brea Cr	F	4.0	279.0	208.0	163	0	FCA 1936.
Buchanan Dam H.V. Eastman Lk	CA Madera	Chowchilla R	F	45.0	587.0	559.0	1,786	1,462	PL 78-874.
			FI	140.0	587.0	486.0	1,786	484	
Burns Dam	CA Merced	Burns Cr	F	6.8	300.0	266.0	662	0	PL 78-534.
Carbon Canyon Dam & Res	CA Orange	Carbon Cr	F	6.6	475.0	403.0	225	0	PL 74-738.
Coyote Valley Dam Lk Mendocino	CA Mendocino	East Fork, Russian R	F	50.1	764.8	737.5	1,922	1,740	PL 75-761.
			IM	72.3	737.5	637.0	1,740	20	
Dry Cr (Warm Springs) Lk & Channel.	CA Sonoma	Dry Cr	F	136.0	495.0	451.1	3,600	2,600	PL 87-874.
			MR	225.0	451.1	291.0	2,600	500	
Farmington Dam	CA San Joaquin, Stanislaus	Littlejohn Cr	F	52.0	156.5	120.0	4,107	0	PL 78-534.
Fullerton Dam & Res	CA Orange	Fullerton Cr	F	0.8	290.0	261.0	62	0	FCA 1936
Hansen Dam Res	CA Los Angeles	Tujunga Wash	F	25.4	1,080.0	990.0	781	0	FCA 1936.
Hidden Dam Hensley Lk	CA Madera	Fresno R	F	65.0	540.0	485.8	1,567	811	PL 87-874.
			FI	85.0	540.0	448.0	1,567	280	
Isabella Lk	CA Kern	Kern R	FI	568.1	2,605.5	2,470.0	11,454	26	PL 785-34.
Lopez Dam Res	CA Los Angeles	Pocoima Wash	F	0.4	1,272.9	1,253.7	40	0	FCA 1936.
Mariposa Dam	CA Mariposa	Mariposa Cr	F	15.0	439.5	370.0	512	0	PL 78-534.
Martis Cr Lk	CA Nevada	Martis Cr	F	19.6	5,838.0	5,780.0	782	61	PL 87-874.
Mathews Canyon Dam & Res	NV Lincoln	Mathews Canyon	F	6.3	5,461.0	5,420.0	300	0	PL 81-516.
Mojave River Dam & Res	CA San Bernardino	Mojave R	F	89.7	3,134.0	[illegible]	1,978	0	PL 86-645.
New Hogan Lk	CA Calaveras	Calaveras R	F	165.0	713.0	666.2	4,333	2,818	PL 78-534.
			FI	302.2	713.0	586.0	4,333	702	
Owens Dam	CA Mariposa	Owens Cr	F	3.6	407.5	347.0	174	0	PL 78-534
Painted Roc Dam & Res	AZ Maricopa	Gila R	F	2,491.5	661.0	524.0	53,200	0	PL 81-516.
Pine Canyon Dam & Res	NV Lincoln	Pine Canyon	F	7.8	5,675.0	5,604.0	254	0	PL 81-516.
Pine Flat Lk Kings R	CA Fresno	Kings R	F	1,000.0	951.5	565.5	5,956	0	PL 78-534.
Prado Dam & Res	CA Riverside	Santa Ana R	F	196.2	543.0	460.0	6,630	0	FCA 1936.
San Antonio Dam & Res	CA Los Angeles	San Antonio Cr	F	7.7	2,238.0	2,125.0	145	0	FCA 1936.
Santa Fe Dam & Res	CA Los Angeles	San Gabriel R	F	32.1	496.0	421.0	1,084	0	FCA 1936, 1941
Sepolveda Dam & Res	CA Los Angeles	Los Angeles R	F	17.4	710.0	668.0	1,335	0	FCA 1936.
Success Lk	CA Tulare	Tule R	FI	75.0	652.5	586.9	2,477	409	PL 78-534.
Terminus Dam Lk Kaweah	CA Tulare	Kaweah R	FI	136.1	694.0	570.0	1,913	276	PL 78-534.
Whitlow Ranch Dam & Res	AZ Pinal	Queen Cr	F	35.6	2,166.0	2,056.0	828	0	PL 79-526.
Whittier Marrows Dam & Res	CA Los Angeles	San Gabriel Rio Hondo R	F	34.9	228.5	184.0	2,411	0	FCA 1936.
			Southwestern Division						
Abiquiu Dam	NM Rio Arriba	Rio Chama	F	572.2	6,283.5	6,220.0	7,460	4,120	PL 80-858.
			FM	191.3	6,220.0	6,060.0	4,120	0	
Addicks Res	TX Harris	Buffalo Bayou	F	200.8	112.0	71.1	16,423	0	HD250-83-2.
Aquilla Lk	TX Hill	Aquilla Cr	F	161.4	564.5	537.5	8,960	3,280	PL 90-483.
			MR	93.6	537.5	478.6	3,280	[illegible]	
Arcadia Lk	OK Oklahoma	Deep Fork R	F	64.4	1,029.5	1,006.0	3,820	1,820	PL 91-611.
			FMCR	27.4	1,006.0	970.0	1,820	[illegible]	
B A Steinhagen Lk	TX Taylor, Jasper	Neches R	F	24.5	83.0	81.0	13,700	10,950	SD93-76-1.
Bardwell Lk	TX Ellis	Waxahachie Cr	F	79.6	439.0	421.0	6,040	3,570	PL 86-369
			M	42.8	421.0	372.6	3,570	0	
Barker Res	TX Harris Ft Bend	Buffalo Bayou	F	209.0	106.0	73.2	16,734	0	HD250-83-2, RHA 1938.
Beaver Lk	AR Carrol, Benton, Washington	White R	F	299.6	1,130.0	1,120.0	31,700	28,220	PL 83-780.
			FPM	925.1	1,120.0	1,077.0	28,220	15,540	PL 85-[illegible]
Belton Lk	TX Bell	Leon R	F	640.0	631.0	594.0	23,600	12,400	PL 7[illegible].
			MI	372.7	594.0	470.0	12,400	42	HD88-81-1.
Benbrook Lk	TX Tarrant, Parker	Clear Fk Trinity R	F	170.4	724.0	694.0	7,630	3,770	HD103-771.
			NM	72.5	694.0	656.0	3,770	730	
Big Hill LK	KN Labette	Big Hill Cr	F	13.1	867.5	858.0	1,520	1,240	PL 87-874.
			FMR	27.2	858.0	814.0	1,240	70	HD572-87-2.
Birch Lk	OK Osage	Birch Cr	F	39.0	774.0	750.5	2,340	1,140	PL 87-874.
			FMCAR	15.8	750.5	730.0	1,140	384	HD563-87-2.
Blue Mountain Lk	AR Yell, Logan	Petit Jean R	F	233.3	419.0	384.0	11,000	2,910	PA 75-761.
Broken Bow Lk	OK McCurtain	Mountain Fk R	F	450.2	627.5	599.5	18,000	14,200	PL 86-500.
			FRPMAC	469.8	599.5	550.5	14,200	9,200	
Bull Shoals Lk	AR Baxter, Marion, Boone	White R	F	2,360.0	695.0	654.0	71,240	45,440	PL 77-228.
	MO Ozark, Taney		PF	1,003.0	654.0	628.5	45,440	33,800	
Canton Lk	OK Blain	N Canadian R	F	265.8	1,638.0	1,615.4	15,710	7,910	PL 75-761.
			FMI	97.2	1,615.4	1,596.5	7,910	2,710	HD88-/75-3.
Canyon Lk	TX Comal	Guadalupe R	F	346.4	934.0	909.0	12,880	8,240	PL 79-14.
			M	366.4	909.0	75.0	8,240	0	
Clearwater Lk	MO Reynolds, Wayne	Black R	F	391.8	567.0	494.0	10,400	1,630	PL 75-761.
Cochiti Lk	NM Sandoval, Sante Fe, Los Alamos.	Rio Grande	F	545.0	5,460.5	5,356.6	9,361	1,200	PL 86-645
			FRC	43.0	5,356.6	5,330.[illegible]	1,200	0	
Conchas Lk	NM San Miguel	Candian R	F	198.8	4,218.0	4,201.0	13,664	9,682	HD 308-74.
			FI	259.6	4,201.0	4,155.0	9,682	3,000	
Copan Lk	OK Washington	L Caney R	F	184.3	732.0	710.0	13,380	4,850	PL 87-874
	KS Chautauqua		FMCA	42.8	710.0	687.5	4,850	110	HD563-87-2.
Council Grove Lk	KS Morris	Neosho R	F	63.8	1,289.0	1,274.0	5,400	3,230	PL 81-516.
			FMAR	46.5	1,274.0	1,240.0	3,230	42	

APPENDIX E—LIST OF PROJECTS—Continued

Project name[1]	State/county	Stream[1]	Project purpose[2]	Storage 1,000 AF	Elev limits feet M.S.L.		Area in acres		Auth legis[3]
					Upper	Lower	Upper	Lower	
DeQueen Lk	AR Sevier	Rolling Fork R	F	101.3	473.5	437.0	4,050	1,880	PL 85-500
			FMCRQ	25.5	437.0	415.0	1,880	710	
Dierks Lk	AR Sevier, Howard	Saline R	F	67.1	557.5	526.0	2,970	1,380	PL 85-500
			FMCR	15.1	526.0	512.0	1,380	810	
Eldorado Lk	KS Butler	Walnut R	F	79.2	1,347.5	1,339.0	10,740	8,000	PL 89-298
			FMAR	154.0	1,339.0	1,296.0	8,000	420	HD232-89-1
Elk City Lk	KS Montgomery	Elk R	F	239.5	825.0	796.0	13,150	4,450	HD440-76-1
			FMA	44.8	796.0	784.0	4,450	84	
Eufaula Lk	OK McIntosh, Pittsburg, Haskell	Candian R	F	1,510.9	597.0	585.0	147,960	105,480	PL 78-525
			FNPM	1,463.0	585.0	565.0	105,480	46,120	
Fall River Lk	KS Greenwood	Fall R	F	234.5	987.5	948.5	10,400	2,350	HD440-76-1
			FA	15.0	948.5	940.0	2,350	1,170	
Fort Gibson Lk	OK Wagoner	Neosho (Grand) R	F	919.2	582.0	554.0	51,000	19,900	FEC 1941
			FP	53.9	554.0	551.0	19,100	16,950	RHA 1946
Fort Supply Lk	OK Woodward	Wolf Cr	F	86.8	2,028.0	2,004.0	5,690	1,820	PL 74-738
			FM	13.9	2,004.0	1,988.0	1,820	0	
Galisteo Dam	NM Santa Fe	Galisteo Cr	F	79.4	5,608.0	5,496.0	2,080	0	PL 86-645
Georgetown Lk	TX Williamson	N.F. San Gabriel R	F	87.6	834.0	791.0	3,220	1,310	PL 87-874
			MC	29.2	791.0	699.0	1,310	0	HD 591-82-2
Gillham Lk	AR Howard, Polk	Cossatot R	F	188.7	569.0	502.0	4,680	1,370	PL 85-500
			FMCQ	29.3	502.0	484.5	1,370	310	
Granger Lk	TX Williamson	San Gabriel R	F	162.2	528.0	504.0	11,040	4,400	PL 87-874
			M	37.9	504.0	440.0	4,400	0	
Grapevine Lk	TX Denton, Tarrant	Denton Cr	F	243.1	560.0	535.0	12,710	7,280	HD103-77-1
			M	154.3	535.0	451.0	7,380	41	
Great Salt Plains Lk	OK Alfalfa	Salt Fk Arkansas R	F	240.0	1,138.5	1,125.0	27,730	8,693	PL 74-738
			FC	31.4	1,125.0	1,115.0	8,690	0	
Greers Ferry Lk	AR Cleburne, Van Buren	Little Red R	F	934.0	487.0	461.0	40,480	31,460	PL 75-761
			FP	716.5	461.0	435.0	31,460	23,740	PL 83-780
Heyburn Lk	OK Creek	Polecat Cr	F	48.4	784.0	761.5	3,700	917	PL 79-526
			FM	3.8	761.5	55.5	917	394	
Hords Cr Lk	TX Coleman	Hords Cr	F	16.7	1,920.0	1,900.0	1,280	510	PL 77-228
			M	5.8	1,900.0	1,848.0	510	0	
Hugo Lk	OK Choctaw	Kiamichi R	F	809.1	437.5	404.5	34,490	13,250	PL 79-526
			FMCAR	127.2	404.5	390.0	13,250	4,500	
Hulah Lk	OK Osage KS Chautauqua	Caney R	F	~~257.9~~	765.0	733.0	13,000	3,570	PL 74-738
			FMA	31.1	733.0	710.0	3,570	0	PL 84-843
Jemez Canyon Dam	NM Sandoval	Jemez R	F	73.0	5,232.0	5,196.1	2,877	1,370	PL 80-858
									PL 81-516
Joe Pool Lk	TX Dalla, Ellis, Tarrant	Mountain Cr	F	1,238.0	536.0	522.0	10,940	7,470	PL 89-298
			M	176.9	522.0	456.0	7,470	10	
John Martin Res	CO Bent	Arkansas R	F	270.3	3,870.0	3,851.0	17,630	11,655	PL 74-738
			FRC	350.9	3,851.0	0.0	11,655	0	
John Redmond Dam & Res	KS Coffee	Neosho R	F	559.0	1,068.0	1,039.0	31,700	9,300	PL 81-516
			FMAR	70.8	1,039.0	1,020.0	9,300	108	
Kaw Lk	OK Kay, Osage KS Cowley	Arkansas R	F	919.4	1,044.5	1,010.0	38,020	17,040	PL 87-874
			FMARC	343.5	1,010.0	978.0	17,040	5,590	
Keystone Lk	OK Tulsa	Arkansas R	F	1,180.0	754.0	723.0	54,300	23,600	PL 81-516
			FNPMC	296.7	723.0	708.0	23,600	13,300	
L&D 01, Norrell	AR Arkansas	Arkansas Post Canal	N	0.0	142.0	142.0	140	140	HD 758-79, RHA 1946
L&D 02, Wilbur D. Mills Dam	AR Desha, Arkansas	Arkansas R	N	18.7	162.3	160.5	10,700	9,400	HD 758-79, RHA 1946
L&D 03	AR Jefferson, Lincoln	Arkansas R	N	8.3	182.3	180.0	3,750	3,180	HD 758-79, RHA 1946
L&D 04	AR Jefferson	Arkansas R	N	12.9	196.3	194.0	5,820	5,200	HD 758-79, RHA 1946
L&D 05	AR Jefferson	Arkansas R	N	14.4	213.3	211.0	6,900	5,550	HD 758-79, RHA 1946
L&D 06, David D. Terry	AR Pulaski	Arkansas R	N	9.6	231.3	229.0	4,830	4,130	HD 758-79
L&D 07, Murray	AR Pulaski	Arkansas R	N	24.7	249.7	247.0	10,350	8,100	RHA 1946
L&D 08, Toad Suck Ferry	AR Faulkner, Perry	Arkansas R	N	8.7	265.3	263.0	4,130	3,600	RHA 1946
L&D 09, Arthur V. Ormond L&D, W Rockefeller Lk.	AR Conway	Arkansas R	N	15.8	287.0	284.0	5,880	4,910	HD 758-79
L&D 10, Lk Dardanelle	AR Pope Yell	Arkansas R	NP	72.3	338.2	336.0	34,700	31,140	HD 758-79, RHA 1946
L&D 11, Ozark-Jetta Taylor	AR Franklin	Arkansas	NPR	25.3	372.5	370.0	11,100	8,800	RHA 1946, HD 758-79
L&D 13, James W. Trimble	AR Sebastian, Crawford	Arkansas R	N	18.1	392.0	389.0	6,820	5,200	RHA 1946
L&D 14, W. D. Mayo	OK Sequoyah, Leflore	Arkansas R	N	0.0	413.0	0.0	1,600	0	PL 79-525
L&D 15, Robert S. Kerr Res	OK Leflore, Sequoyah	Arkansas R	NP	84.7	460.0	458.0	43,800	40,760	PL 79-525
L&D 16, Webbers Falls Res	OK Muskogee	Arkansas R	NP	32.4	490.0	487.0	10,900	9,300	PL 79-525
L&D 17, Chouteau	OK Wagoner	Verdigris R	N	0.0	511.0	511.0	2,270	2,270	PL 79-525, HD 758-79-2
L&D 18, Newt Graham	OK Wagoner	Verdigris R	N	0.0	532.0	532.0	1,490	1,490	PL 97-525
Lake O' The Pines	TX Marion	Cypress Cr	F	579.5	249.5	228.5	38,200	18,700	PL 79-526
			M	250.0	228.5	201.0	18,700	1,100	
Lavon Lk	TX Collin	East Fork, Trinity R	F	275.6	503.5	492.0	29,450	21,400	HD [illegible]-78-2
			M	380.0	492.0	433.0	21,400	2,870	
Lewisville Lk Garza-Little Elm Dam	TX Denton	Elm Fork Trinity R	F	525.2	532.0	515.0	39,080	23,280	HD 403-77-1
			M	436.0	515.0	433.0	23,280	12	
Marion Lk	KS Marion	Cottonwood R	F	80.2	1,358.5	1,350.5	9,050	6,200	PL 81-516
			FMAR	83.3	1,350.5	1,320.0	6,200	170	
Millwood Lk	AR Little R Hempstead	Little R	F	1,650.0	287.0	259.2	95,200	29,200	PL 79-526
			FMC	153.3	259.2	252.0	29,200	13,100	HD 785-79
Navarro Mills Lk	TX Navarro Hill	Richland Cr	F	143.2	443.0	424.5	11,700	5,070	HD 498-83-2
			M	53.2	424.5	375.3	5,070	0	
Nimrod Lk	AR Perry, Yell	Fourche La Fave R	F	307.0	373.0	342.0	18,300	3,550	FCA 1938

APPENDIX E—LIST OF PROJECTS—Continued

Project name [1]	State/county	Stream [1]	Project purpose [2]	Storage 1,000 AF	Elev limits feet MSL		Area in acres		Auth legis [3]
					Upper	Lower	Upper	Lower	
Norfork Lk	AR Baxter, Fulton	North Fork R	F	731.8	580.0	552.0	30,700	21,990	PL 75-761
	MO Ozark		FP	707.0	552.0	510.0	21,990	12,320	FCA 1941
North Fork Lk	TX Williamson	N.F. San Gabriel R	F	87.6	834.0	791.0	3,220	1,310	PL 87-874
			MC	29.2	791.0	699.0	1,310	0	HD 591-82-2
O. C. Fisher Lk	TX Tom Green	N. Concho R	F	277.2	1,938.5	1,908.0	12,700	5,440	PL 77-228
			M	80.4	1,908.0	1,836.0	5,440	3	
Oologah Lk	OK Rogers	Verdigris R	F	965.6	661.0	638.0	56,800	29,460	PL 75-761
			FMN	544.1	638.0	592.0	29,460	1,120	
Optima Lk	OK Texas	N. Candian R	F	100.5	2,779.0	2,763.5	7,640	5,340	PL 74-738
			FMRC	117.7	2,763.5	2,726.0	5,340	1,335	
Pat Mayse Lk	TX Lamar	Sanders Cr	F	64.6	460.5	451.0	7,680	5,993	PL 87-874
			FMCR	119.9	451.0	415.0	5,993	996	HD 88-71
Pine Cr	OK McCurtain	Little R	F	388.1	480.0	443.5	17,230	4,980	PL 85-500
			FMAC	77.6	443.5	414.0	4,980	700	HD 170-85-1.
Proctor Lk	TX Comanche	Leon R	F	310.1	1,197.0	1,162.0	14,010	4,610	PL 83-780, HD 535-81-2
Sam Rayburn Res	TX Jasper, San Augustine, Angelina	Angelina R	F	1,099.4	173.0	164.4	142,700	114,500	HD 981-76-1
			PMC	1,446.2	164.4	149.0	114,500	74,040	
Santa Rosa	NM Guadalupe	Pecos R	F	340.0	4,746.2	4,776.5	10,740	3,823	PL 83-780
			FI	160.0	4,776.5	4,746.2	7,115	3,823	
Sardis	OK Pushmatah	Jackfork Cr	F	122.6	607.0	599.0	16,960	13,610	HD 602-79-2
			FMR	274.2	599.0	542.0	13,610	40	
Somerville Lk	TX Washington, Lee, Burleson	Yegua Cr	F	337.7	258.0	238.0	24,400	11,460	PL 83-780
			M	143.9	238.0	200.0	11,460	0	
Skiatook	OK Osage	Hominy Cr	F	178.0	729.0	714.0	13,690	10,190	HD 563-87.
			FMARC	311.6	714.0	657.0	10,190	1,430	
Stillhouse H. Lk	TX Bell	Lampasas R	F	390.6	666.0	622.0	11,830	6,430	PL 83-780
			M	204.9	622.0	498.0	6,430	0	
Table Rock Lk	MO Taney, Stone, Barry	White R	F	760.0	931.0	915.0	52,250	43,070	PL 77-228
	AR Carroll, Boone		FP	1,181.50	915.0	881.0	43,070	27,300	FCA 1938
Tenkiller Ferry Lk	OK Cherokee, Sequoyah	Illinois R	F	576.7	667.0	632.0	20,800	12,900	RHA 1946
			FP	371.0	632.0	594.5	12,900	7,370	
Texoma Lk, Denison Dam	TX Marshall	Red R	F	2,669.0	640.0	617.0	144,000	88,000	PL 75-761
	OK Bryan, Cook, Grayson		FPM	1,612.0	617.0	590.0	88,000	41,000	
Toronto Lk	KS Woodson	Verdigris R	F	179.8	931.0	901.5	11,740	2,660	HD 440-76-1
			FMA	10.7	901.5	896.7	2,660	1,720	
Trinidad Lk	CO Las Animas	Purgatoire R	F	58.0	6,260.0	6,230.0	2,107	1,453	PL 85-500
			FI	20.0	6,230.0	0.0	1,453	0	
Two Rivers Dam	NM Chaves	Rio Hondo R	F	150.0	4,032.0	3,945.0	4,806	0	PL 83-780
Waco Lk	TX Mclennan	Bosque R	F	3.3	500.0	455.0	19,440	7,270	PL 83-780.
			M	100.8	455.0	370.0	7,240	0	HD 535-81-2
Waurika Lk	OK Jefferson	Beaver Cr	F	140.4	962.5	951.4	15,000	10,100	PL 88-253
			FMCAR	199.7	951.4	910.0	10,100	830	
Whitney Lk	TX Hill Bosquel	Brazos R	F	1,372.0	571.0	533.0	49,820	23,560	PL 77-228
			PM	381.9	533.0	425.0	23,560	475	HD 390-76-1.
Wister Lk	OK Leflore	Pouteau R	F	387.0	502.5	474.6	23,070	5,000	PL 75-761
Wright Patman Lk	TX Bowie, Cass	Sulphur R	F	2,363.7	259.5	220.0	119,700	20,300	PL 79-526
			FM	142.7	220.0	180.0	20,300	0	

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[1] Res—Reservoir; Lk—Lake; Div—Diversion; R—River; Cr—Creek; Fk—Fork; L&D—Lock & Dam; GIWW—Gulf Intercoastal Waterway; FG—Floodgate; CS—Control Structure; DS—Drainage Structure; PS—Pump Station.

[2] F—Flood Control; N—Navigation; P—Hydropower; I—Irrigation; M—Municipal and/or Industrial Water/Supply; C—Fish and Wildlife Conservation; R—Recreation; A—Low Flow Augmentation or Pollution Abatement; Q—Quality or Silt Control.

[3] PL—Public Law; HD—House Document; RHA—River & Harbor Act; PW—Public Works; FCA—Flood Control Act; WSA—Water Supply Act.

[47 FR 44544, Oct. 8, 1982, as amended at 52 FR 15804, Apr. 30, 1987; 52 FR 23816, June 25, 1987]

DEPARTMENT OF THE TREASURY

Customs Service

19 CFR Part 24

[T.D. 87–44]

Harbor Maintenance Fee

AGENCY: U.S. Customs Service, Treasury.

ACTION: Clarifying amendment of interim regulations.

SUMMARY: This notice clarifies interim amendments of the Customs Regulations to implement provisions of the Water Resources Development Act of 1986 (the Act) which authorizes the Customs Service to assess a harbor maintenance fee of 0.04 percent (.0004) on the value of commercial cargo loaded on or unloaded from a commercial vessel at a port within the definition of the Act. The Harbor maintenance fee applies to port uses by commercial vessels which load or unload merchandise or passengers unless specifically exempted from the fee. The proceeds of the fee collected by Customs, together with certain other fees, are deposited in the Harbor Maintenance Trust Fund which is made available, subject to appropriations, to the U.S. Army Corps of Engineers for the improvement and maintenance of U.S. ports and harbors.

The amendments were made on an interim basis by the publication of T.D. 87–44 in the Federal Register of March 30, 1987 (52 FR 10198), due to the limited period of time available to initiate the changes before the law became effective on April 1, 1987. However, written comments were invited for consideration before a final rule is issued. Comments were to have been received on or before May 29, 1987. In response to several requests to extend the comment period, by notice published in the Federal Register on June 2, 1987 (52 FR 20593), the comment period was extended to August 28, 1987.

Both Customs and the Army Corps of Engineers have received numerous inquiries concerning the ports, channels, and harbors subject to the fee. To assist users, the list of ports has been reformatted. No new ports have been added to the use of Customs port codes to help describe ports has not changed.

DATES: The amendment to the regulation is effective on July 14, 1987. Comments are requested on or before August 28, 1987.

ADDRESS: Comments may be submitted to and inspected at the Regulations Control Branch, U.S. Customs Service, Room 2324, 1301 Constitution Avenue NW., Washington, DC 20229.

All comments submitted will be available for public inspection in accordance with the Freedom of Information Act (5 U.S.C. 552), § 1.4, Treasury Department Regulations (31 CFR 1.4), and § 103.11(b), Customs Regulations (19 CFR 103.11(b)), between 9:00 a.m. and 4:30 p.m. on normal business days, at the address above.

FOR FURTHER INFORMATION CONTACT: Jean F. Maguire, Director, User Fee Task Force (202-566-5868).

Accordingly, Title 19 of the Code of Federal Regulations, Chapter I, is amended as follows:

PART 24—[AMENDED]

1. The Authority for Part 24 continues to read as follows:

Authority: 19 U.S.C. 66, 1202, 1624, 31 U.S.C. 9701; Pub. L. 99–272, Pub. L. 99–509, Pub. L. 99–662.

2. In § 24.24(b)(1), the list of ports is revised to read as follows:

§ 24.24 Harbor maintenance fee.

* * * * *

(b) * * *

(1) * * *

PORT CODES, NAMES, AND DESCRIPTIONS OF PORTS: SUBJECT TO SECTION 1402 OF PUB. L. 99-662 HARBOR MAINTENANCE FEE

Port code, port name, and state	Port descriptions and notations
Alaska	
3126—Anchorage	
3106—Dalton Cache	
3102—Ketchikan	
3127—Kodiak	
3112—Petersburg	
3125—Sand Point	
3115—Sitka	
Alabama	
1901—Mobile	
California	
2802—Eureka	Includes Crescent City.
Los Angeles/Long Beach Port	Includes Dana Point; movements between these locations are intraport.
2709—Long Beach Harbor	
2704—Los Angeles	
2713—Port Hueneme	Includes Channel Island Hbr
2501—San Diego	Includes Oceanside Hbr
2707—San Luis	
San Francisco Bay Area Ports*	Includes all points inshore of the Golden Gate Bridge on the bays and the straits on the Napa, Sacramento and San Joaquin Rivers, and on the deep water channels to Sacramento and Stockton. Movements between points above Suisun Bay (Longitude 122 degrees West at Port Chicago) are intraport. Movements between points below Longitude 122 degrees West are intraport. All other movements are interport.
2813—Alameda	
2830—Carquinez Strait	
2815—Crockett	
2820—Martinez	
2811—Oakland	
2821—Redwood City	
2812—Richmond	
2816—Sacramento	
2809—San Francisco	
2828—San Joaquin	
2829—San Pablo Bay	
2827—Selby	
2810—Stockton	
2831—Suisun Bay	
Connecticut	
0410—Bridgeport	Includes Housatonic River, and Stamford Harbor.
0411—Hartford	Includes all points on the Connecticut River between Hartford and Long Island Sound.
0412—New Haven	
0413—New London	
District of Columbia	
Potomac River Ports, DC, MD, & VA*.	Includes all points on the Potomac River (see Chesapeake Bay Ports: MD and VA map) from a line between Point Lookout and the Little Wicomico River at Chesapeake Bay to and including Washington and Alexandria. Movements between these points are intraport.
5402—Alexandria, VA	
line 5401—Washington DC	
Delaware	
Delaware River Ports, DE, NJ, PA*.	Includes all points on the Delaware River from Trenton to the sea at a line between Cape Henlopen and Cape May, all points on the lower four miles of the Christina River, Delaware, and all points on the lower six miles of the Schuylkill River, Pennsylvania. Includes movements on the Chesapeake & Delaware Canal east of Delaware State Highway 13. Movements between these points are intraport.
1102—Chester, PA	
1107—Camden, NJ	
1113—Gloucester, NJ	
1118—Marcus Hook, PA	
1105—Paulsboro, NJ	
1101—Philadelphia, PA	
1103—Wilmington, DE	
Florida	
1807—Boca Grande	
1306—Carabelle	
1805—Fernandina Beach	
5205—Fort Pierce	
1803—Jacksonville	
5202—Key West	
5201—Miami	
1818—Panama City	
1819—Pensacola	
5203—Port Everglades	
1820—Port St. Joe	
Tampa Bay Ports*	Includes Alafia River, Port Manatee, Port Sutton, Port Tampa, Weedon Island and all other points on or approached using the Tampa Harbor Channel inshore of the Sunshine Skyway Bridge. Movements between these points are intraport.
1814—St. Petersburg	
1801—Tampa	
5204—West Palm Beach	
Georgia	
1701—Brunswick	Includes St. Marys River
1703—Savannah	
Hawaii	
3202—Hilo	
3201—Honolulu	
3203—Kahului	Includes Kaunakakai Harbor
3204—Nawiliwili Port Allen	
Illinois	
Chicago Area Ports*	Includes Indiana Harbor; does not include Buffington Hbr
3901—Chicago	
3904—East Chicago, IN	
Indiana	
3905—Gary	Includes only Michigan City and Burns Waterway Harbor. Fee does not apply at Gary.
3905—East Chicago*	See Chicago Area Ports, Illinois.

PORT CODES, NAMES, AND DESCRIPTIONS OF PORTS: SUBJECT TO SECTION 1402 OF PUB. L. 99-662 HARBOR MAINTENANCE FEE—Continued

Port code, port name, and state	Port descriptions and notations
Louisiana	
2017—Lake Charles	
Mississippi River Ports:	
Baton Rouge and Vicinity* 2004—Baton Rouge 2009—Destrehan 2010—Gramercy 2014—Good Hope 2013—St. Rose	Includes all river points from River Mile 115 Above Head of Passes (AHP) at the St. Charles Parish-Jefferson Parish line, to River Mile 233.9 AHP at Baton Rouge. Movements between these points are intraport.
Mississippi River Ports:	
New Orleans and Vicinity* 2012—Avondale 2002—New Orleans 2005—Port Sulphur	Includes all river points from River Mile 115 AHP to Mile 21.6 BPH (Below Head of Passes) via Southwest Pass and to Mile 14.7 BHP via South Pass. Also includes all points on the Inner Harbor Navigation Canal and the Mississippi River Gulf Outlet. Movements between these points are intraport.
2001—Morgan City*	Includes Houma and points on the Gulf Intracoastal Waterway between Mile 49.3 West and Mile 107.0 West. Movements between these points are intraport.
Maine	
0102—Bangor	
0111—Bath	
0132—Belfast	Includes Penobscot River points (Bucksport and Winterport); fee does not apply at Belfast, Sandy Point, or Castine Harbor.
0101—Portland	
Maryland	
Chesapeake Bay Ports: Maryland* 1303—Baltimore 1302—Cambridge	Includes all Maryland points on Chesapeake Bay and its tributary waters except for the Potomac River. Also includes the Waterway from Delaware River to Chesapeake Bay west of U.S. 13 highway bridge. Movements between these points are intraport. (Also see Chesapeake Bay Ports: VA.)
Massachusetts	
0401—Boston*	Includes all of the Port of Boston inshore of Castle Island on the Inner Harbor and Chelsea and Mystic Rivers, and all points on the Weymouth Fore, and Town Rivers. Movements between points on the Saugus River in the north to Scituate in the south are intraport.
0404—Gloucester	
0407—Fall River	
Michigan	
3843—Alpena	Fee does not apply at Stoneport.
3801—Detroit	
3844—Ferrysburg	
3816—Grand Haven	
3809—Marquette	
3815—Muskegon	Includes Pentwater Harbor and South Haven Harbor.
3802—Port Huron	Includes Port Huron and all points on the St. Clair and Black Rivers in St. Clair County. Also includes Harbor Beach, Michigan.
3842—Presque Isle	
3804—Saginaw-Flint-Bay City	Does not include Alabaster.
3803—Sault Ste Marie	Does not include Port Dolomite or Port Inland, Michigan; does include Manistique, Michigan, and Grand Marais Harbor, Michigan.
Minnesota	
Duluth/Superior 3801—Duluth, MN 3808—Superior, WS	Includes Duluth, MN, and Superior, WS; movements between these ports is intraport.
3814—Silver Bay	Fee applies only at Grand Marais.
Mississippi	
1902—Gulfport	
1903—Pascagoula	
New Hampshire	
0131—Portsmouth	
New Jersey	
1107—Camden	(see Delaware River Ports).
1113—Gloucester	(see Delaware River Ports).
1105—Paulsboro	(see Delaware River Ports).
1003—Newark	(see New York Harbor).
1004—Perth Amboy	(see New York Harbor).
New York	
New York Harbor, NY, NJ* 1001—New York, NY 1003—Newark, NJ 1004—Perth Amboy, NJ	Includes all points in New York and New Jersey within the Port of New York on the waters inshore of a line between Sandy Hook and Rockaway Point and south of Tappan Zee Bridge on the Hudson and west of Throgs Neck Bridge on the East River. Movements between all points within the New York Port District boundaries described in New York Code (Chapter 154, Laws of New York, 1921), are intraport.
1002—Albany*	Includes all points on the Hudson River between Tappan Zee Bridge and the Troy Lock and Dam.
0901—Buffalo-Niagara Falls	Includes Cattaraugus Creek.
0708—Cape Vincent	
0701—Ogdensburg	
0904—Oswego	
0903—Rochester	
0905—Sodus Point	Includes Little Sodus Bay Harbor.
North Carolina	
1511—Beaufort-Morehead City	
1501—Wilmington	Includes all points on the Cape Fear and Northeast Cape Fear Rivers inshore of the Atlantic Ocean entrance. Movements between these points are intraport.
Ohio	
4108—Ashtabula	(or Port Code 4122).
4101—Cleveland	
4109—Conneaut	(or Port Code 4122).
4111—Fairport	
4117—Huron	
4121—Lorain	
4105—Toledo-Sandusky	
Oregon	
Columbia River Ports, OR, WA 2901—Astoria, OR 2904—Portland, OR 2909—Kalama, WA 2905—Longview, WA 2908—Vancouver, WA	Includes all points on the Columbia River downstream of Bonneville Dam, and all points on the Willamette River downstream of River Mile 21. Movements between these points are intraport.
2903—Coos Bay	Includes Port Orford.
2902—Newport	Includes Tillamook Bay.
Pennsylvania	
1102—Chester	(see Delaware River Ports).
4106—Erie	
1116—Marcus Hook	(see Delaware River Ports).
1101—Philadelphia	(see Delaware River Ports).
Puerto Rico	
4907—Mayaguez	
4908—Ponce	
4909—San Juan	
Rhode Island	
0502—Providence	
South Carolina	
1601—Charleston	
1602—Georgetown	
Texas	
2301—Brownsville	
5312—Corpus Christi	
5311—Freeport	
Galveston Bay Ports* 5310—Galveston 5306—Texas City	Includes Port Bolivar and all points on Galveston Bay in Galveston County. Movements between these points are intraport.
5301—Houston*	Includes Bayport, Baytown, and all other points on or accessed via the Houston Ship Channel north of the Galveston County line. Movements between these points are intraport.
5313—Port Lavaca	
Sabine Ports* 2104—Beaumont 2103—Orange 2101—Port Arthur 2102—Sabine	Includes Port Neches, Sabine Pass and all other points on the Sabine-Neches Waterway. Movements between these points are intraport.
Virginia	
5402—Alexandria*	(see District of Columbia, Potomac River Ports).
Chesapeake Bay Ports: Virginia* 1406—Cape Charles 1402—Newport News 1401—Norfolk	Includes all Virginia points on Chesapeake Bay inshore of a line from Cape Henry to Cape Charles, and tributary waters including the ports of Hampton Roads. Does not include the Potomac River or the James River above the James River Bridge at Newport News. Movements between these points are intraport. (Also see Chesapeake Bay Ports: MD.)
James River Ports, VA* 1408—Hopewell 1404—Richmond-Petersburg	Includes all points on the James River above the James River Bridge at Newport News. Movements between these points are intraport.

PORT CODES, NAMES, AND DESCRIPTIONS OF PORTS: SUBJECT TO SECTION 1402 OF PUB. L. 99-662 HARBOR MAINTENANCE FEE—Continued

Port code, port name, and state	Port descriptions and notations
Washington	
3003—Aberdeen	
Puget Sound Ports, WA*	Includes *only* the ports listed. Movements between these ports or any other U.S. points on Puget Sound or the Strait of Juan de Fuca east of Cape Flattery are intraport.
3005—Bellingham	
3006—Everett	
3026—Olympia	
3007—Port Angeles	
3001—Seattle	
3002—Tacoma	
2909—Kalama	(see Columbia River Ports, OR).
2905—Longview	(see Columbia River Ports, OR).
2908—Vancouver	(see Columbia River Ports, OR).
Wisconsin	
3602—Ashland	Includes Port Wing.
3706—Manitowoc	Includes Two Rivers and Kewaunee.
3702—Marinette	Includes Oconto.
3701—Milwaukee	
3708—Racine	
3707—Sheboygan	
3608—Superior	(see Duluth/Superior, Minnesota).

Note: The port codes shown in the above listing are those of the U.S. Customs Service.
*Indicates that a map of the port area is available from the U.S. Customs Service.

* * * * *

Dated: July 7, 1987.

Harvey B. Fox,

Director, Office of Regulations & Rulings.

[FR Doc. 87-15777 Filed 7-13-87; 8:45 am]

BILLING CODE 4820-02-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 558

New Animal Drugs for Use in Animal Feeds; Lasalocid

AGENCY: Food and Drug Administration.

ACTION: Final rule.

SUMMARY: The Food and Drug Administration (FDA) is amending the animal drug regulations to reflect approval of a new animal drug application (NADA) filed by Moorman Manufacturing Co. providing for use of a free-choice vitamin-mineral Type C lasalocid feed for pasture cattle for increased rate of weight gain.

EFFECTIVE DATE: July 14, 1987.

FOR FURTHER INFORMATION CONTACT: Jack C. Taylor, Center for Veterinary Medicine (HFV-126), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857, 301-443-5247.

SUPPLEMENTARY INFORMATION: Moorman Manufacturing Co., 1000 North 30th St., Quincy, IL 62301-3498, is sponsor of NADA 138-993 which provides for use of a 60-gram-per-pound Bovatec (15 percent lasalocid) Type A article to make Moorman's Cattle Minerals BT Medicated, a Type C feed containing 1.08 percent lasalocid for use in pasture cattle (slaughter, stocker, and feeder cattle, and dairy and beef replacement heifers) for increased rate of weight gain. The drug is consumed at a rate of 60 to 200 milligrams per head daily in a free-choice, self-limiting supplemental feed.

Based on the data and information submitted, the application is approved and 21 CFR 558.311 is amended by adding paragraph (b)(5) and revising paragraph (e)(1)(xi) to reflect the approval. The basis for approval is discussed in the freedom of information summary.

In accordance with the freedom of information provisions of Part 20 (21 CFR Part 20) and § 514.11(e)(2)(ii) (21 CFR 514.11(e)(2)(ii)), a summary of safety and effectiveness data and information submitted to support approval of this application may be seen in the Dockets Management Branch (HFA-305), Food and Drug Administration, Rm. 4-62, 5600 Fishers Lane, Rockville, MD 20857, from 9 a.m. to 4 p.m., Monday through Friday.

The agency has determined under 21 CFR 25.24(d)(1)(i) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

List of Subjects in 21 CFR Part 558

Animal drugs, Animal feeds.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs and redelegated to the Center for Veterinary Medicine, Part 558 is amended as follows:

PART 558—NEW ANIMAL DRUGS FOR USE IN ANIMAL FEEDS

1. The authority citation for 21 CFR Part 558 continues to read as follows:

Authority: Sec. 512, 82 Stat. 343-351 (21 U.S.C. 360b); 21 CFR 5.10 and 5.83.

2. Section 558.311 is amended by adding new paragraph (b)(5), and in paragraph (e)(1)(xi) by revising the "Sponsor" column to read "000004, 021930," to read as follows:

§ 558.311 Lasalocid.

* * * * *

(b) * * *

(5) 15 percent activity to 021930 (Type A article provided by 000004) for use in free-choice vitamin-mineral Type C cattle feeds as in paragraph (e)(1)(xi).

* * * * *

Dated: June 30, 1987.

Gerald B. Guest,

Director, Center for Veterinary Medicine.

[FR Doc. 87-13896 Filed 7-13-87; 8:45 am]

BILLING CODE 4160-01-M

DEPARTMENT OF THE INTERIOR

Office of Surface Mining Reclamation and Enforcement

30 CFR Part 917

Kentucky Abandoned Mine Land Reclamation Program Amendment

AGENCY: Office of Surface Mining Reclamation and Enforcement (OSMRE), Interior.

ACTION: Final rule.

SUMMARY: On March 25, 1985, the State of Kentucky submitted to OSMRE a proposed amendment to its Abandoned Mine Land Reclamation (AMLR) Plan. After opportunity for public comment and review of the amendment, the Deputy Director, Operations and Technical Services of OSMRE has determined that the Kentucky amendment meets the requirements of the Surface Mining Control and Reclamation Act (SMCRA) and the Secretary's regulations at 30 CFR Part 884. Accordingly, the Deputy Director has approved the Kentucky amendment.

EFFECTIVE DATE: The rule is effective August 13, 1987.

ADDRESSES: Copies of the full text of the amendment are available for review during regular business hours at the following locations:

Kentucky Department of Natural Resources and Environmental Protection, Frankfort, Kentucky 40601
Office of Surface Mining Reclamation and Enforcement, Lexington Field Office, 340 Legion Drive, Suite 28, Lexington, Kentucky 40504
Office of Surface Mining Reclamation and Enforcement, Administrative Records Office, 1100 L St. NW., Room 5205, Washington, DC 20240

FOR FURTHER INFORMATION CONTACT: W. Hord Tipton, Director, Lexington Field Office, Office of Surface Mining Reclamation and Enforcement, 340 Legion Drive, Suite 28, Lexington, Kentucky 40504.

SUPPLEMENTARY INFORMATION: Title IV of the Surface Mining Control and

ANSWERS TO QUESTIONS BY CHAIRMAN MOYNIHAN
GALVESTON NAVIGATION PROJECT

QUESTION. General Kelly, please explain the status of the Galveston Bay navigation project.

ANSWER. The Office of Management and Budget recently notified the Assistant Secretary of the Army for Civil Works that the project will not be able to be included in the administration's proposal for the Water Resources Development Act of 1990. The U.S. Army Corps of Engineers and other Federal environmental agencies have agreed to continue environmental impact studies of the project while engineering and design work on the project continues according to the schedule. In addition, several agencies of the State of Texas are assisting in the studies.

QUESTION. What is the nature of the environmental issues that have been raised, and what is your position on these issues?

ANSWER. The US Fish and Wildlife Service and National Marine Fisheries service have remaining concerns regarding impacts from project deepening and project dredged material disposal, mitigation, and cumulative impacts:

1. Impacts From Project Deepening. Deepening of the existing ship channel will advance the salt wedge further up the estuary. The Services disagree with the degree and impact of the changes documented by the Corps, especially to sessile organisms (e.g., oysters). The salinity model utilized during the feasibility study will be succeeded by a state-of-the-art three dimensional model developed and operated in coordination with the resource agencies during PED studies to further define

these impacts.

2. Impacts From Project Dredged Material Disposal. The Services disagree with the impact of unconfined disposal of dredged material within Galveston Bay as documented by the Corps, especially to shrimp and finfish. The locally preferred disposal plan obviates these concerns.

3. Mitigation: Because of the disagreements outlined in paragraphs 2 and 3, the Services and the Corps disagree on appropriate mitigation.

4. Cumulative Impacts. The Services request that the Corps develop a cumulative environmental impact statement with a scope that considers the effect of all existing and future Federal, State, Local government, and private developments within Galveston Bay and its tributary streams upon the estuary. The Corps considers the scope to this request too broad, the necessary assumptions too speculative, and the information unnecessary to the purpose of defining project impacts. However, we have established a process to resolve these conflicts within the next few months and reach agreement of all necessary studies.

QUESTION. What will be the impact of the comments made by other Federal agencies on the project?

ANSWER. The other Federal agencies have agreed to continue environmental impact studies and to make every effort to ensure that the studies and a supplemental environmental impact statement are completed within two years, while engineering and design work on the project continues according to the schedule. The Corps and other Federal agencies want to ensure that all concerns are fully addressed before commencing with the construction phase of the project.

WATER SUPPLY

QUESTION: Given the Corps authority in water supply and their interest in national infrastructure development, what can, and should the Corps undertake in the area of single purpose water supply?

ANSWER: Development of the water supply purpose at a Corps project is governed by the Water Supply Act of 1958, as amended, which recognized that the Federal Government should only be involved in connection with multiple purposes projects. This authority issue is not restrictive with regard to the development of a strategy for addressing the Nation's infrastructure problems. The Corps experience in water supply studies, development of storage at multiple purpose reservoirs, provision of water supply infrastructure in support of military programs, and activities in providing emergency supplies, provide a basis for Corps participation in the study of water supply infrastructure needs and strategies. The infrastructure effort will establish the roles and responsibilities of the participating Government and private sector entities, and identify the needs for additional authority.

ANSWERS TO QUESTIONS BY SENATOR GRAHAM
SINGLE BENEFICIARIES

QUESTION: In accordance with the Army Corps of Engineers Digest of Water Resource Policies and Authorities (dated February 15, 1989), the Corps will not recommend any Federal cost participation in construction or expansion of a Federal navigation project where the improvement would serve a single entity.

How does the Department of the Army define an exclusive entity for purposes of this Department policy?

The single entity policy is in accordance with what Federal law?

Has the Department's single entity policy had the opportunity for public review and comment? If not, why not?

Is a shipper which is not chartered by a terminal operator on the channel in question defined as a project beneficiary? If not, why not?

Under What specific circumstances has the Department enforced this policy. Could you identify each project for me and the corresponding justification in follow-up correspondence?

ANSWER: The determination as to whether it is appropriate to recommend Federal participation is made on the basis of separate property ownership, which a proposed project will benefit. The term "entity" means something that exists independently. This policy is intended to preclude Federal participation where a property under single-ownership (single entity) would receive all of the benefits from a Federal project.

The single-owner policy stems from Section 2 of the River and Harbor Act of 1920, which requires the Chief of Engineers to make a determination of the general versus the special interest in an improvement, and recommend an appropriate sharing of costs between Federal and non-Federal interests. Federal Government intervention is not required unless there is a need for collective action.

The recent policy statement was a clarification to longstanding policy, and is not considered a modification of policy that needed consideration of public review. The relationships between property ownership and proposed improvements are straightforward. Previous guidance focused on beneficiaries and Federal participation in projects that served single beneficiaries was precluded. The term "beneficiaries" was ambiguous, and presented definitional and evaluation problems.

Shippers, as well as receivers are project beneficiaries. A privately-owned terminal may serve multiple shippers and receivers (beneficiaries), but it is a single-owner situation under the policy. Where one owner controls a facility, if the expected benefits are real, the desired improvements can be financed by the owner with costs recovered through adjustment of rates charged for use of the facility or through savings realized from reduction of its operating costs. Therefore, Government intervention is unwarranted.

OPERATION AND MAINTENANCE OF NON-FEDERAL IMPROVEMENTS

QUESTION: Section 204 (e)(e) Operation and Maintenance of Public Law 99-662 (the Water Resource Development Act of 1986) provides that whenever a non-Federal interest constructs improvements to any harbor or inland harbor, the Secretary shall be responsible for maintenance, provided that the Secretary determines before construction that the project improvement meets certain requirements.

Has this provision been enforced with respect to any navigation improvement project? If so, which ones?

Has the Department issued any further guidelines for enforcing this section of law? If not, could you give me a date specific when regulations or further guidance will be issued by the Department?

ANSWER: There has been little interest in using this authority to date. Draft policy guidance has been developed, and will soon be revised to reflect review comments from Corps field offices. The final guidance should be available for distribution in the May-June timeframe.

ANSWERS TO QUESTIONS BY SENATOR CHAFEE
USER FEE PROPOSALS

QUESTION: Would you review the various user fee proposals put forth by the Administration in connection with the Corps program? Why were these activities targeted for revenue generation?

ANSWER: Seven user fee proposals are being put forth by the Administration to fund certain Corps programs. Four of the proposals require new authority. These proposals are summarized as follows:

1. Cost sharing of flood plain management services - Authorizes the apportionment of approximately 50-percent of the costs of flood plain management services provided under Section 206 of the Flood Control Act of 1960 to beneficiaries of the services. The cost sharing would be phased in over a three year period, beginning at 10-percent in Fiscal year 1991, 30-percent in Fiscal Year 1992, and increasing to 50-percent in Fiscal Year 1993.

2. Cost sharing of Section 22, Planning Assistance to States - Authorizes the apportionment of approximately 50-percent of the costs of providing water resources planning assistance furnished states and entities designated by states under Section 22 of the Water Resources Development Act of 1974. The cost sharing would be phased in over a three year period, beginning at 10-percent in Fiscal year 1991, 30-percent in Fiscal Year 1992, and increasing to 50-percent in Fiscal Year 1993.

3. Recreation user fees at specialized recreation sites - Authorizes the collection of recreation user fees for use of specialized recreation sites and facilities, including but not limited to, improved campsites, swimming beaches, and boat launching ramps. The proposal also eliminates the requirement to provide one free campground at each project where camping is permitted. The proposal, however, is not intended to authorize the imposition of fees for general public access to water resources development projects.

4. Increase in Harbor Maintenance Fee - Authorizes the increase of ad valorem rate for the port user fee from its current 0.04 percent to 0.125 percent. The increased rate will allow recovery of up to 100 percent of the eligible operation and maintenance dredging program costs and will allow recovery of the costs of certain National Oceanic and Atmospheric Administration programs that benefit the commercial navigation industry. The increase would also pay administrative expenses, up to $5,000,000 per year, incurred by the Department of the Army, the Department of the Treasury and the Department of Commerce in administering the port use fee. The remaining three proposals will be accomplished administratively. These proposals include user fee increases for the regulatory program permits, cottage site leases and shoreline management fees. All of these activities were targeted for revenue generation because they are performed for clearly identifiable beneficiaries of the services and therefore, the beneficiaries should pay for these services. The first three proposals, requiring new authorization, have been

previously proposed by the Administration. The increase in the Harbor Maintenance Fee is a new Administration proposal. The proposal is consistent with the cost sharing philosophy embodied in the Water Resources Development Act of 1986 where water resources projects are operated and maintained at 100-percent non-Federal cost.

INFRASTRUCTURE

QUESTION. You mention the need to revitalize this Nation's infrastructure in your testimony. Do you envision the Corps working with localities to develop technology to deal with environmental concerns such as groundwater contamination, or is the Corps' interest in traditional infrastructure projects, such as road and bridge construction?

ANSWER. The Corps considers infrastructure to include not just roads and bridges but the environmental infrastructure as well. For our purposes, we consider infrastructure to include, in addition to transportation, water resources, water supply systems, waste water treatment facilities, solid and hazardous and toxic waste disposal facilities, energy conservation, and public facilities. We believe the Corps has the expertise, experience, and technical capability gained through its Civil Works, Military Programs and Support For Others missions to effectively address many of this Nation's infrastructure needs. We will assist the Nation in whatever way we are requested, consistent with our abilities and authorities and within the resources granted to us.

HYDROPOWER OPERATION

QUESTION. Many members of this Committee have heard complaints regarding the operation of Corps hydroelectric sites, especially in relation to competing uses, for example, power versus recreation. Is there a need to establish a more formal procedure for the implementation of operational changes at hydro sites?

ANSWER. Most of the complaints that have been brought to the agency's attention regarding the effects of water control plans, or their modifications, on hydroelectric power generation at Corps multipurpose reservoirs have dealt with drought impacted projects. Other complaints have related either to the reallocation of portions of multipurpose conservation storage reservoirs to water supply or limitations on generation imposed by environmental protection concerns. Cases in both categories are currently being investigated by the General Accounting Office in response to a request signed jointly by the chairmen of the Senate Committee on Environment and Public Works and the Subcommittee on Water Resources, Transportation and Infrastructure.

The operation of multiple purpose reservoir projects involves careful, up-to-the-minute evaluations of hydrologic conditions in the watersheds, reservoirs and rivers (pool elevations, inflow rates, downstream river stages, forecasted and observed rainfall, etc.), and application of the approved water control plans to assure best use of the available water resource. At times, needs arise to modify water control plans in response to changing situations. The modifications range from those that are necessary to respond to emergencies during flood control operations to longer term modifications such as are necessary to respond to extended periods of drought. All water control plan modifications require approval by the Division Engineer.

When developing a new or modified water control plan the Corps must consider all specifically authorized purposes of the project together with other Congressionally mandated purposes, such as water quality control, fish and wildlife, etc. Water control management of multiple purpose reservoirs during droughts involves the development of water control plan modifications to apportion the water shortage amongst the several, and often conflicting, project purposes. It is during such times, when the corps, the public and the affected parties must redetermine and adjust the priority of project purposes to best use the available resources, that water control management becomes most difficult. In addition to the stated authorities for operational changes, the Water Supply Act of 1958 granted discretionary authority to the Chief of Engineers to add water supply to completed projects when it will have no significant effect on other authorized purposes and will involve no major structural or operational change.

There is no need to establish a more formal procedure to implement these operational changes since present regulations and practice already includes public notification and involvement whenever a significant modification of a water control plan is being considered. Corps of Engineers water control management plans are developed and executed in conformance with policies and guidance set forth in 33 CFR 222.7. These regulations require that the corps will conduct public involvement activities, as appropriate, to apprise the public during plan development or modification. Short term changes made during emergencies are by necessity limited in the amount of coordination practicable, but longer term changes or permanent changes are developed through a process whereby the interested and affected parties are informed and public meetings are conducted to explain the proposed modifications and solicit reaction and comment.

USES OF DREDGED MATERIAL

QUESTION. What is the Corps policy regarding the use of clean dredge material from a navigation maintenance project? When I visited Oregon Inlet in North Carolina, I was surprised to see that the dredge material was left to drift out to sea when an adjacent shoreline could have been nourished.

ANSWER. Corps policy is to accomplish maintenance dredging of Federal navigation projects in the least costly environmentally acceptable manner possible. Sand from maintenance operations is placed on adjacent shores when that alternative meets this policy, and disposal in this manner is common at many projects.

Section 933 of the Water Resources Development Act of 1986 provides additional authority for the Secretary of the Army to place beach quality sand from dredging operations onto adjacent beaches if requested by State, if the Secretary determines the action is in the public interest, and upon payment by the State of 50 percent of the increased cost over alternative methods of disposal. The Corps views beach quality sand as a natural resource, and is supportive of the use of the Section 933 authority, but the interest from states in using this approach has been limited. The State of Florida has expressed an interest, and at its request the Corps annually provides a 5-year schedule of dredging activities so that the State can budget for Section 933 work, if desired.

At the Oregon Inlet project, the Corps has generally disposed of the material in the least costly environmentally acceptable manner, but an attempt is made to make some use of the sand resource. The material dredged from the entrance channel is deposited as close to the shore as possible, in a zone where some of the sand will be redistributed by wave action and carried to the adjacent shore. Much of that material can be lost at sea, as you observed. The shores adjacent to Oregon Inlet are Federally-owned, and the Corps could place dredged material on these shores, but the other Federal agency must request this work and reimburse the Corps for the added costs. Last year, in response to a request from the State of North Carolina, some sand removed from an interior channel was placed to protect the highway bridge and nearby shore, using funds provided by the North Carolina Department of Transportation, Dare County, and the U.S. Fish and Wildlife Service.

ANSWERS TO QUESTIONS BY SENATOR WARNER

WETLANDS CLASSIFICATION

QUESTION. Does the M.O.U. contemplate different classes of wetlands to be protected?

ANSWER. Yes. The mitigation MOA, like the Section 404(b)(1) Guidelines that it is based upon, recognizes that wetlands differ in function and value. This recognition is factored into a determination of project impacts and the type and level of mitigation required. The MOA explicitly recognizes that compensatory mitigation ratios will vary depending on the functional values of the area being impacted and the likelihood of success of the mitigation project.

QUESTION. Does the Corps of Engineers have any plans to delineate between the types of wetlands and their values to the environment?

ANSWER. The Corps realizes that all wetlands are not equal in terms of functions and values and that our knowledge of wetland systems in general is sometimes limited. Therefore, beginning in Fiscal Year 1991, the Corps proposes to substantially increase its research efforts in the area of wetlands functions and values assessment.

PUBLIC INTEREST REVIEW

QUESTION. If the philosophy of "Avoiding the disturbance of all wetlands at any cost" is the general rule under the M.O.U., what is the role of the Corps' public interest review process in permit determinations?

ANSWER. It should be noted that it is not the Corps policy that disturbance to wetlands should be avoided at any cost. Avoidance is required to the extent that it is practicable. The term practicable is defined as meaning "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." A key objective of the Guidelines and the MOA is to offset unavoidable adverse impacts to aquatic resources. The determination of what level of mitigation constitutes "appropriate" mitigation is based solely on the values and functions of the aquatic resource that will be impacted. Further, under the Guidelines, appropriate mitigation is required only to the extent that it is practicable.

Public interest characteristics such as need and societal value are not factored into a determination of appropriate mitigation as determined by the Guidelines. Such considerations are, however, taken into account during the public interest review process. It is important to understand that compliance with the public interest review requirements cannot nullify the requirement to comply with the Guidelines.

TESTIMONY OF

THOMAS C. JORLING, COMMISSIONER

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

BEFORE THE SUBCOMMITTEE ON

WATER RESOURCES, TRANSPORTATION AND INFRASTRUCTURE

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

MARCH 1, 1990

WASHINGTON, D.C.

MR CHAIRMAN, MEMBERS OF THE COMMITTEE, I AM THOMAS C. JORLING, COMMISSIONER OF THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION. I AM RESPONSIBLE FOR IMPLEMENTING THE LAWS OF THE STATE OF NEW YORK REGARDING ENVIRONMENTAL PROTECTION AND NATURAL RESOURCES MANAGEMENT. THIS AUTHORITY INCLUDES MAKING AND RECOMMENDING INVESTMENTS IN PROGRAMS AND INFRASTRUCTURE THAT ALLOW THE STATE TO NURTURE AND BENEFIT FROM OUR NATURAL RESOURCES. AS A RESULT, I APPRECIATE THE OPPORTUNITY TO TESTIFY ON THE PROPOSED 1990 WATER RESOURCES DEVELOPMENT ACT. IN ADDITION, I WILL SHARE THE DEPARTMENT'S EXPERIENCE WITH THE U.S. ARMY CORPS OF ENGINEERS' (CORPS) IMPLEMENTATION OF BOTH THE 1986 AND 1988 WATER RESOURCES DEVELOPMENT ACTS.

1990 WATER RESOURCES DEVELOPMENT ACT

SECTION 206 - ONONDAGA LAKE MANAGEMENT CONFERENCE

I STRONGLY SUPPORT SECTION 206 OF THE 1990 ACT WHICH REQUIRES THE GOVERNOR, ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS AND EPA ADMINISTRATOR TO CONVENE A MANAGEMENT CONFERENCE FOR RESTORING, CONSERVING, AND MANAGING ONONDAGA LAKE IN NEW YORK STATE. THIS PROVISION IS GENERALLY CONSISTENT WITH THE RULES AND REGULATIONS ALREADY ADOPTED BY THE MANAGEMENT CONFERENCE PURSUANT TO APPROPRIATION LANGUAGE. AS YOU KNOW MR. CHAIRMAN, I ACCOMPANIED GOVERNOR CUOMO WHEN HE ATTENDED THE FIRST MEETING OF THE CONFERENCE YOU CONVENED. I WOULD ONLY NOTE THE OPTIMISM EXPRESSED AT THAT MEETING. WE CAN RESTORE ONONDAGA LAKE.

INFRASTRUCTURE COUNCIL

SENATOR, YOU ALONG WITH A MAJORITY OF THE COMMITTEE ARE CO-SPONSORS OF S. 2046, "THE NATIONAL INFRASTRUCTURE COUNCIL ACT OF 1990". AS YOU KNOW, THIS LEGISLATION ESTABLISHES A FEDERAL INFRASTRUCTURE COUNCIL. THIS COUNCIL COULD FOCUS THE DEBATE ON INFRASTRUCTURE AND INCREASE OUR NATIONAL INVESTMENT IN THE FACILITIES AND PROJECTS THAT WE NEED TO BECOME A MORE PRODUCTIVE NATION WHILE PROTECTING OUR UNDERLYING LIFE SUPPORT SYSTEM. THE COUNCIL WOULD ALSO ENSURE PROJECTS ARE DELIVERED AND MAINTAINED EFFICIENTLY. I HAVE BEEN INFORMED THAT SENATOR BURDICK INTENDS TO HOLD HEARINGS IN THE NEAR FUTURE. I WOULD LIKE TO LEND MY SUPPORT.

OUR STATE WATER RESOURCE NEEDS, AS DETERMINED BY A NUMBER OF SURVEYS, EXCEED $20 BILLION FOR WATER AND SEWER INFRASTRUCTURE OVER THE NEXT 10-15 YEARS. FOLLOWING THE MODEL OF THE CLEAN WATER ACT PROGRAM WHICH CREATES A STATE REVOLVING FUND, FEDERAL FUNDING IS NEEDED TO LEVERAGE STATE AND LOCAL MONIES, ESPECIALLY FOR WATER SUPPLY PROJECTS. THIS IS AN ISSUE WITH WHICH YOU ARE VERY FAMILIAR, HAVING FOUGHT FOR NEW YORK CITY'S THIRD WATER TUNNEL, HAVING INTRODUCED LEGISLATION TO INSTITUTE A MORE EQUITABLE APPROACH TO THE ALLOCATION OF FEDERAL FUNDS FOR WATER PROJECTS AND, IN THE 1986 ACT, HAVING ATTEMPTED TO ADDRESS THE IMPORTANCE OF SINGLE PURPOSE WATER SUPPLY PROJECTS. THE FEDERAL INFRASTRUCTURE COUNCIL WOULD HAVE THE POTENTIAL TO PROVIDE THE ORGANIZATION AND LEADERSHIP TO PROMOTE, FOSTER AND ENCOURAGE BETTER INFRASTRUCTURE INVESTMENTS LIKE SINGLE PURPOSE SUPPLY PROJECTS.

SECTION 305

THE DEPARTMENT SUPPORT THE INTENT OF SECTION 305 OF THE 1990 ACT, ALTHOUGH THE LANGUAGE REQUIRES TECHNICAL REVISION. AS DRAFTED, SECTION 305 COULD FORCE A COMMUNITY TO CONSTRUCT A PROJECT USING A 500-YEAR LEVEL OF FLOOD PROTECTION WHERE A 100-YEAR LEVEL OF PROTECTION WOULD BE ECONOMICALLY JUSTIFIABLE.

1986 AND 1988 WATER RESOURCES DEVELOPMENT ACTS

THE 1986 ACT WAS TOUTED BY THE PAST ADMINISTRATION AS FOSTERING A PARTNERSHIP CONTRACT OF EQUALS AMONG FEDERAL , STATE AND LOCAL GOVERNMENTS. IT WAS INTENDED TO ESTABLISH A MORE EFFECTIVE WATER RESOURCES PROGRAM. STATE AND LOCAL GOVERNMENTS WERE REQUIRED TO SHOULDER MORE RESPONSIBILITIES AND TO PAY MORE PROJECT COSTS IN RETURN FOR A MORE OPEN AND EFFICIENT PROGRAM TO BE DELIVERED BY THE CORPS. UNFORTUNATELY HOWEVER, SENATOR MOYNIHAN, THE MAJOR EFFECT OF THE 1986 ACT IS ONLY THAT WE ARE NOW PAYING MORE THAN BEFORE.

LET ME SUMMARIZE THE FACTORS UNDERLYING THIS SITUATION:

- THE SO-CALLED LOCAL COOPERATION AGREEMENT (LCA) HAS BECOME NOTHING MORE THAN STANDARDIZATION OF POLICY IMPOSED BY THE OFFICE OF THE CHIEF OF ENGINEERS (OCE). DISTRICT COMMANDERS ARE ALLOWED NO DISCRETION OR FLEXIBILITY TO NEGOTIATE A PARTNERSHIP AGREEMENT THAT REFLECTS LOCAL NEEDS. REQUESTS BY A LOCAL SPONSOR FOR

DEVIATIONS FROM THE POLICY ARE MORE OFTEN DENIED THAN ADDRESSED. LCA CONTRACT PROVISIONS THAT BENEFIT LOCAL GOVERNMENTS ARE OFTEN IGNORED BY THE CORPS. FOR EXAMPLE, IN THE MORICHES INLET NAVIGATION SHORE PROTECTION PROJECT THE CORPS UNILATERALLY MADE DECISIONS ON CHANGE ORDERS AND DID NOT SEEK THE DEPARTMENT'S INPUT AS REQUIRED UNDER THE LOCAL COOPERATION AGREEMENT.

- AS YOU ARE WELL AWARE, MR. CHAIRMAN, SECTION 1105 OF THE 1986 ACT REQUIRES THE CORPS TO REIMBURSE THE STATE FOR 50% OF THE COSTS OF OPERATING THE NYS BARGE CANAL. THE CORPS HAS OPTED TO DO A FEASIBILITY STUDY FIRST TO DETERMINE IF THE BENEFITS OUTWEIGH THE COSTS OF FEDERAL PARTICIPATION.

- SECTION 34 OF THE 1988 ACT PLACED AN ANNUAL, RATHER THAN A TOTAL PROJECT FUNDING CAP ON THE NEW YORK HARBOR DRIFT REMOVAL PROJECT. THE CORPS HAS INTERPRETED THIS SECTION TO ALLOW IT TO CONSIDER EACH INCREMENT OR REACH OF THIS PROJECT AS A NEW CONSTRUCTION START RATHER THAN AS A CONTINUING AUTHORIZATION. CONSEQUENTLY, ADDITIONAL PROJECT COSTS AND ADDITIONAL DELAY HAVE JEOPARDIZED THIS PROJECT. UNLESS THE CORPS REVERSES THIS ADMINISTRATIVE DECISION, REMOVAL OF DRIFT MATERIAL WILL BE SLOWED DOWN. THIS WILL RESULT IN DANGERS TO NAVIGATION, MORE FLOATABLES WASHING UP ON OUR RECREATIONAL BEACHES AND PERPETUATION OF DERELICT WATERFRONTS.

- SECTION 934 OF THE 1986 ACT DOES NOT REQUIRE AN ECONOMIC ANALYSIS BEFORE PERIODIC BEACH NOURISHMENT PROJECTS ARE EXTENDED. THIS SECTION WAS INTENDED TO INCREASE THE PERIOD OF TIME AUTHORIZED TO CONTINUE PERIODIC NOURISHMENT, NOT TO PROVIDE A RATIONALE TO

REQUIRE REJUSTIFICATION OF THE PROJECT.

- SECTION 49 OF THE 1988 ACT, WHICH YOU HELPED SPONSOR AND WHICH WAS INTENDED TO HELP NEW YORK AND NEW JERSEY SOLVE A GROWING WATER SUPPLY CRISIS, HAS NOT BEEN FUNDED.

- THE 1986 ACT INCREASED THE SECTION 22 AUTHORIZED LIMITS FOR PLANNING ASSISTANCE TO THE STATES. HOWEVER, THE STATES HAVE NOT RECEIVED THE ADDITIONAL FUNDS AND THE ACTUAL PRE-1986 APPROPRIATION LEVELS HAVE BEEN REDUCED.

AS YOU CAN SEE IT'S NOT DIFFICULT TO VIEW THIS "NEW" PARTNERSHIP SKEPTICALLY. THE DEVELOPMENT , OPERATION AND MAINTENANCE OF PROJECTS AND PROGRAMS THAT PEOPLE HAVE COME TO DEPEND ON FOR THEIR HEALTH, SAFETY AND WELFARE HAVE BEEN CURTAILED.

I WOULD LIKE TO SUGGEST THE FOLLOWING AMENDMENTS TO REMEDY ADDITIONAL CONCERNS I HAVE WITH 1986 AND 1988 ACTS.

1. THE COST SHARING REQUIREMENTS IN THE 1986 AND 1988 ACTS FOR PROJECTS THAT ARE UNDERTAKEN TO CORRECT DESIGN AND CONSTRUCTION DEFICIENCIES SHOULD BE THOSE REQUIREMENTS THAT WERE IN EFFECT AT THE TIME OF INITIAL CONSTRUCTION. THE STATE AND LOCALITIES SHOULD NOT BE REQUIRED TO PAY FOR THE FEDERAL GOVERNMENT'S DESIGN DEFICIENCY CORRECTIONS.

2. SECTION 104 OF THE 1986 ACT SHOULD BE AMENDED TO EXTEND THE AUTHORITY FOR CREDIT FOR COMPATIBLE WORK TO PROJECTS UNDER CONTINUING AUTHORITIES, SUCH AS SECTION 205 OF THE 1948 FLOOD CONTROL ACT. LOCAL INTERESTS ARE RELUCTANT TO UNDERTAKE IMPROVEMENTS WITHIN THEIR CAPABILITIES FOR FEAR OF JEOPARDIZING A FEDERAL PROJECT.

3. SECTION 914 OF THE 1986 ACT SHOULD BE AMENDED TO REQUIRE THE SECRETARY OF THE ARMY TO CONSIDER AND EVALUATE FLOOD DAMAGE REDUCTION MEASURES WITHOUT CONSIDERING THE FREQUENCY OF FLOODING, DRAINAGE AREA AND AMOUNT OF RUNOFF (800 CFS RULE). FEDERAL ASSISTANCE SHOULD BE AVAILABLE ON AN EQUITABLE BASIS WITHOUT ARBITRARY LIMITATIONS.

4. AMENDMENTS ARE NEEDED TO PREVENT THE CORPS FROM PERFORMING COSTLY REDUNDANT WORK. FOR EXAMPLE, THE CURRENT LCA REQUIRES THE CORPS TO REVIEW AND APPROVE REAL ESTATE APPRAISALS. HOWEVER, NEW YORK'S FLOOD CONTROL LAND ACQUISITION PROCESS ALREADY REQUIRES APPRAISALS TO BE PREPARED BY QUALIFIED INDEPENDENT APPRAISERS AND TO BE REVIEWED IN-HOUSE BY QUALIFIED APPRAISERS AT TWO LEVELS. CORPS REVIEW MERELY INCREASES PROJECT COSTS.

5. AMENDMENTS ARE NEEDED TO REQUIRE THAT FEDERAL POLICY DEVELOPMENT INCLUDES INPUT FROM APPROPRIATE NON-FEDERAL INTERESTS. PUBLIC HEARINGS SHOULD BE HELD BEFORE FINAL ADOPTION OF POLICY.

6. IT IS TIME TO ABOLISH THE CORPS' ARTIFICIAL AND ADMINISTRATIVE SEPARATION OF SHORE PROTECTION AND NAVIGATION PROJECTS. WATER RESOURCES POLICIES AND INITIATIVES SHOULD RECOGNIZE THAT STABILIZING INLETS IN A BARRIER ISLAND SYSTEM CAUSES SIGNIFICANT CHANGES IN THE NATURAL LITTORAL PROCESSES. MATERIAL TRAPPED IN AN INLET MUST BE BY-PASSED AROUND THE INLET AS AN INTEGRAL PART OF NAVIGATION PROJECTS. NAVIGATION MAINTENANCE DREDGING MUST BE COUPLED WITH DOWNDRIFT BEACH NOURISHMENT.

THE CORPS' WATER RESOURCES POLICIES AND AUTHORITIES ARE REPLETE WITH EXAMPLES OF THE NEGATIVE VALUE IT PLACES UPON DREDGED

MATERIAL. IT IS REFERRED TO AS "SPOIL" AND ITS USE IS CALLED "DISPOSAL." RATHER THAN VIEWING IT AS AN ECONOMIC LIABILITY, LEGISLATION SHOULD RECOGNIZE THIS MATERIAL AS A VALUABLE RESOURCE. SECTION 933 OF THE 1986 WATER RESOURCES DEVELOPMENT ACT MADE A SIGNIFICANT STEP IN THE RIGHT DIRECTION BY ALLOWING THE CORPS TO SHARE UP TO 50% OF THE ADDITIONAL COSTS OF PLACING DREDGED MATERIAL ON ADJACENT BEACHES. HOWEVER, THE CORPS HAS REQUIRED A COSTLY AND TIME CONSUMING STUDY TO IMPLEMENT THE SECTION 933 AMENDMENT. THE COSTS OF MITIGATING THE EFFECTS OF INLETS BY BY-PASSING TRAPPED MATERIAL SHOULD BE FACTORED DIRECTLY INTO NAVIGATION PROJECTS.

THANK YOU FOR GIVING ME THE OPPORTUNITY TO TESTIFY HERE TODAY.

STATEMENT BY

LILLIAN C. LIBURDI

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

BEFORE

THE U.S. SENATE

SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION,

AND INFRASTRUCTURE OF THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

REGARDING THE WATER RESOURCES DEVELOPMENT ACT OF 1990

WASHINGTON, D.C.

MARCH 1, 1990

Good morning. My name is Lillian C. Liburdi. I am Director of the Port Department of the Port Authority of New York and New Jersey. The Port Authority is grateful for the opportunity to testify before this Subcommittee to offer our views on the Water Resources Development Act of 1990.

The Port Authority was established over 65 years ago by compact between the States of New York and New Jersey to develop transportation facilities and to promote the commerce of the New York and New Jersey port region. In fact, the development of the shipping industry and the movement of goods through the port district is the mandate that led to the establishment of the Port Authority. The port industry in the New York-New Jersey region represents approximately 3 percent of the gross regional product which means $14 billion annually in economic activity, supports directly and indirectly 200,000 jobs and $.4 billion in tax revenues.

We were pleased to note that this proposed water resources bill, the second since the historic Water Resources Development Act of 1986, maintains the two year schedule for authorization of the U.S. Army Corps of Engineers civil works program. I commend you for taking this action to ensure that the nation's critical water development programs continue uninterrupted.

Based on our experience with the 1986 and 1988 acts we wish to offer several suggestions for your consideration. We feel that as a full partner with the federal government in the development of our port's waterways these changes will promote a fairer and more efficient economic partnership.

I will first discuss dredged material disposal. It is a vexing matter that concerns us and many ports around the country. The Port of New York and New Jersey has about 240 miles of federal navigation channels, 15 to 45 feet deep. Under the authority vested by the Congress, with the River and Harbor bill of 1824 and through the Supreme Court's interpretation of the Commerce Clause of United States Constitution to include federal responsibility for construction, regulation and operation of navigable waters, the Corps has regulatory responsibility for all dredged material disposal activities that occur within United States waters.

We feel that for the Corps to fulfill its mission and responsibility for harbor navigation the disposal of dredged material must be an integral part of that mission. The disposal of material dredged from federal channel bottoms, as a result of channel improvements or maintenance, is clearly a national concern. In the case of New York/New Jersey approximately 65 percent of the total material dredged results from federal channel maintenance. It should not be regarded as a local port responsibility, particularly as dredged material disposal management becomes a more difficult challenge facing all levels of government, and I am here to say that it is becoming more difficult, both in our port and across the country. It must be noted that this is at the same time that Congress is giving serious consideration to coastal protection legislation that, while having many worthwhile features, could greatly complicate responsible dredged material disposal strategies in the ports.

Historically, the provision of navigation facilities essential to interstate and international commerce has been, first and foremost, a federal responsibility. In the 1986 Act, Congress fully adopted the concept of non-federal cost sharing for all channel improvement projects and user fees to cover a portion of the cost of maintaining federal channels. And while some of the costs of navigation projects were made a local responsibility the federal government has arbitrarily and selectively chosen to shun responsibility for certain disposal methods. The navigation projects are federal projects with a clear federal responsibility and providing a clear national benefit. To regard the ultimate management of dredged material and its attendant costs as unrelated to what is otherwise a federal concern lacks logic. Said another way, if planning and engineering costs are an integral part of the project cost, why is the cost of the ultimate disposal of dredged material not? In short, we urge that the cost of disposal of dredged material from a federal navigation project with national trade policy and economic benefits be a federal responsibility.

Mr. Chairman, the Port of New York-New Jersey faces an immediate need for a long term dredged material disposal strategy. The Corps of Engineers is about to issue a major report on disposal options, the product of nearly eight years of study and effort. Similar studies are getting underway for ports elsewhere in the country. Some of the options can be implemented almost immediately. But none are without some environmental consequence and all have opponents and proponents. To settle on a workable and economically practical strategy requires political will, the full participation of the federal government and the cooperation of all sectors. I hope that we can look to this subcommittee for guidance and assistance in resolving this question on a regional and national basis.

On a port specific subject, Mr. Chairman, we wish to thank you for your important support of the New York Harbor Collection and Removal of Drift Project. This waterfront cleanup project has proven to be a most effective strategy for reducing navigation hazards to vessels operating in the port and for preventing driftwood from leaving the harbor and washing up on New York and New Jersey beaches. Unfortunately, we must inform you that the Corps has instituted a number of administrative changes dealing with project review and funding. The Water Resources Act of 1988 renewed the authorization to permit the continuation of the project which is only half complete. Last year, Congress appropriated $1.9 million for this fiscal year. Yet despite the demonstration of continued support for this important work in the port:

- we are advised that of the $1.9 million, only a work allowance of $100,000 will be spent; it is for the purpose of conducting a new economic analysis of the project, and
- each segment or reach will now be considered as a new start by the corps, each requiring an economic analysis, rather than being viewed as elements of a single project.

Mr. Chairman, to make managable a project in a harbor of over 500 miles of waterfront the cleanup project was divided into approximately 26 reaches. These new requirements will seriously delay local efforts to clean up the waterways and beaches. The total project was judged to have a cost benefit ratio of 6.3 to 1. I submit that no benefit will be realized if the Corps of Engineers is permitted to turn an established navigation safety and cleanup project into a long term bureaucratic exercise for economists.

Switching to another matter, present Corps' procedures cost the non-federal sponsor lost interest on money contributed under the cost-sharing provisions of the 1986 Act. The Anti-Deficiency Act prohibits the Corps of Engineers from awarding construction contracts until non-federal funds are deposited in the U.S. Treasury. However, the Corps does not pay out these funds until several months later, thus resulting in a loss of interest to the non-federal sponsor. A simple solution to this problem is to exempt the Corps from the Anti-Deficiency Act and require that the non-federal sponsor, 1) demonstrate the availability of funds and 2) make its contributions at the time a contractor's bill is payable. This will permit the non-federal sponsor to manage the public funds entrusted to them in a responsible and prudent manner.

In addition, Mr. Chairman, the 1986 Act also authorizes the recovery of the non-federal portion provided by a port for construction of a harbor navigation project through local port user fees. However, the provisions of section 208 of the Act impose excessive restrictions on the ability of ports to implement such collection. Therefore, we suggest that the Congress examine methods to adjust the requirements to permit a more appropriate and realistic identification of project beneficiaries.

The Corps new "single beneficiary" policy requires a determination of federal interest based on consideration of the number and type of project uses. The new requirement is unrelated to national economic benefits. this Corps policy establishes "ownership" or future criteria for the justification of expenditure of federal funds for a channel improvement project. A channel providing access to a privately owned terminal serving several shippers would be designated a single user channel and not considered for federal funding. We request that this policy be changed to consider multiple-beneficiaries that benefit from a private marine terminal.

We appreciate the provision of your bill that would have the Corps determine harbor development project benefits received by the armed forces to be paid by the federal government. Since military benefits are difficult to quantify as a proportionate share of harbor navigation projects, we urge the subcommittee to consider a fixed percentage offset for local sponsors when the federal government is a project beneficiary.

Finally, Mr. Chairman, I must briefly comment on the Administration's proposed increase in the Harbor Maintenance Tax. I cannot say that we were surprised by the proposal. However, I will say that for a tripling of the present fee, the Administration proposes absolutely no additional benefit to ports or port users. To my mind, it is very difficult to justify.

Again, we thank you for the opportunity to testify on the water resources development bill.

STATEMENT OF THE

AMERICAN ASSOCIATION OF PORT AUTHORITIES

BY

R. ERIK STROMBERG
PRESIDENT

BEFORE

THE SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION, AND INFRASTRUCTURE

OF THE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

UNITED STATES SENATE

MARCH 1, 1990

ON

THE WATER RESOURCES DEVELOPMENT ACT OF 1990

Good morning Mr. Chairman. My name is Erik Stromberg. I am President of the American Association of Port Authorities. AAPA represents virtually every public port agency in the United States as well as the major port agencies in Canada, Latin and South America and the Caribbean Sea nations. Our members are public entities established to fulfill mandated public purposes, primarily economic development through the facilitation and promotion of waterborne commerce.

Mr. Chairman, I commend you for introducing S. 2183, the Water Resources Development Act of 1990. We are grateful to the subcommittee for its hard work that led to the landmark passage of the 1986 Act, which revived our Nation's water resources development program, and the follow-up 1988 legislation. As a result, many long-needed deepdraft navigation projects have been either completed, or completed through some beneficial increment, or are now under construction. Nevertheless, there have been some notable disappointments and setbacks primarily due to controversies over where to relocate dredged material. Furthermore, from a local sponsor perspective, bringing a project to the construction phase with the Corps of Engineers (Corps) as a partner has been, without exception, a trying and frustrating experience. Some of our difficulties stem from the understandable consequences of changing standard Corps operating procedures, and some of them are do to factors beyond the agency's control. However, despite rhetoric espousing the new partnership, we have a long way to go.

In 1988, Congress enacted a modest, but extremely important, follow-up authorization bill -- a bill that we hoped would put us back firmly on a two year cycle. If I leave one message with you today, it is that we must maintain this two-year schedule. If a project is economically justified, environmentally acceptable, and is supported financially and otherwise by the local sponsor throughout the arduous planning process, a dependable authorization timetable is needed. An assured biennial target date is critical for effective planning and budgeting in state and local government.

With over three years of experience with the Act, there are several changes we would like you to consider this year which would improve the federal/nonfederal partnership -- a partnership that goes back to the beginning of our country and is based on well-established national, regional, state, and local interests in our deepdraft channel navigational system. The 1986 Act placed greater procedural as well as financial burdens on the local sponsor. We agreed to those primarily budget-driven changes in our historic relationship with the federal government in order to get the Corps to work again on many long overdue projects. However, at this point, it is our objective and intent to be full partners with the federal government in order to better and more efficiently develop our Nation's navigation system -- there's nothing like paying part of the check to get one's attention. From that perspective, we suggest the following changes to the 1986 Act.

The Allocation of Dredged Material Disposal Costs. The disposal of dredged material is often the most difficult problem associated with a harbor channel improvement. When the Corps of Engineers studies the best placement options for dredged material, in concert with a host of environmental and natural resource regulatory agencies, all potential alternatives, including the various land and water-based alternatives, are considered equally in the analysis.

On the other hand, all disposal alternatives are not cost shared equally. If a confined site is the best alternative, the cost of building it is a sponsor responsibility which can be deducted from the 10 percent repayment requirement. A similar project using open water disposal exclusively avoids this cost. The disposal of dredged material from federal channel bottoms is clearly integral to the overall project and should be treated as such in our cost sharing policies. AAPA recommends that the costs of constructing confined disposal facilities should be considered part of the total project cost and shared according to the percentages established in Section 101(a)1. Dredged material disposal is an issue of national and international significance.

Sections 204 and 205. Sections 204 and 205 of WRDA 86 were intended to speed up the process of building a federal navigation project by allowing the sponsor to construct the project and then seek reimbursement from Congress. These "fast tracking" provisions were part of a package to make the new cost sharing more palatable to local sponsors. However, the provisions are overly restrictive with respect to Corps oversight of the process, and confusion surrounds the roles and responsibilities of the nonfederal sponsor. For example, the Corps is not willing to use its federal navigational servitude powers on behalf of the nonfederal sponsor even though almost all navigation improvements require the use of these exclusively federal powers.

A major reason why these provisions are overly restrictive is that they require additional permits after the project has been approved through the exhaustive National Environmental Policy Act review. With NEPA's environmental analysis, the additional permit requirements of Section 204 are redundant and expose the sponsor to potential litigation on the state level. Mr. Chairman, we would like to work with you on amendments to Section 204 that would make Section 204 work as it was intended.

With Section 204 made workable, we would also like to see it made applicable to the construction of continuing authority small navigation projects (Section 107, P.L. 86-645). We see no reason why the potential cost savings should not be made available to small navigation project sponsors.

Lost Interest on Project Sponsor Funds. A collection of federal government procurement law and regulation, collectively referred to as the "Antideficiency Act," is resulting in the loss of thousands of dollars in interest revenue to project sponsors. The law prohibits federal agencies from obligating federal funds for a project if the funds necessary to pay the entire obligation are not deposited in the U.S. Treasury. Therefore, the Corps withdraws sponsor escrow account funds long before they are necessary to pay a construction contractor (because the contractor is not paid until project segments are completed satisfactorily). Interest on the funds taken by the government from the sponsor, but not paid to the contractor for months (or years), is lost to the project sponsor. Nonfederal sponsors want to pay the bill when the bill is payable, not when construction begins or at any other arbitrary advance payment schedule. With the use of escrow accounts or letters of credit, there is zero risk to the government for taking sponsor funds concurrently with paying the contractor. This committee can establish that nonfederal payments are due in full at the time the Corps makes payments to the contractor and no sooner. If sponsor funds are not made available within twenty-four hours of a request by the Corps, the Corps can simply withdraw the necessary funds from the escrow account.

The Corps' New Single Beneficiary Policy. The Corps has a new "single beneficiary" policy that is unrelated to the economic accrual of national benefits when evaluating a navigation project. The new policy is based on the ownership of a private terminal on a navigation channel, rather than on transportation cost savings or the number of shippers benefitting from the federal channel. Under the new policy, if only one privately owned company is located on a channel, there is no federal interest in improving the channel regardless of the distribution of benefits. However, under the former policy, the distribution of benefits was critical to defining whether the channel improvement served multiple beneficiaries. AAPA supports the former policy and the legislation needed to codify it.

We believe, for example, that if company X owns a single terminal on a channel dedicated solely to shipping its own products, the channel serving X should be designated a single user channel and not in the federal interest. On the other hand, if company Y owns a terminal serving the shipping needs of several shippers, and can lower the unit cost of a product with a more efficient navigation channel providing transportation cost savings, there is a recognized federal interest. The new Corps policy does not differentiate between company X and company Y, ignoring the multiple-beneficiaries of company Y's navigation channel.

Section 10 Permit Enforcement. Since 1899, Section 10 permits for utility crossings of navigable waters have been required from the Corps. Under WRDA 86, the cost of relocating utility transmission lines for channels of greater than 45 feet in depth is shared 50-50 by the project sponsor and the utility owner, and the Corps will compel the removal of the utilities. As a matter of policy, however, the Corps will not compel utility relocations for channel depths of less than 45 feet except as a last resort, leaving the port to try to find other legal authorities (the '86 Conference Report clarifies that relocations at this depth remain the financial responsibility of the utility owner). Unfortunately, the only law applicable in most states is the Corps' own reservations of the right to compel removal or relocation of utilities contained as permit conditions in the Section 10 permits. As a result of this poorly drafted legislation, local sponsors are given the responsibility for utility relocations without any corresponding delegation of federal authority to accomplish it. AAPA would like Congress to direct the Corps enforce its own permits. Alternatively, AAPA would support an amendment that would authorize the project sponsor to invoke and enforce existing Corps permit conditions to compel utility relocations by the utility owners.

Authorizing Disposal Site Management Fees. Where multiple user disposal sites are employed in a harbor area, and when it is agreed on the local level that user fees are necessary to properly manage and monitor the site, the Corps needs the authority to keep these funds at the district level. If potential fees must be sent to the U.S. Treasury, such a solution is not possible. A fee system has worked well at the Craney Island site in Hampton Roads, Virginia, but it was only possible because of 1946 project-specific authorizing legislation allowing the district to keep the funds in local accounts. A provision is needed in this bill to authorize the Corps to manage these potential funds on the district level.

Military Benefits Adjustment. AAPA strongly supports Section 306 of your bill that would allow the Secretary to reduce the local share of project costs to the extent that there are direct and quantifiable benefits to the military.

In-Kind Services for Feasibility Studies. WRDA 86 limits the amount of in-kind services a project sponsor can provide as part of its cost share for a feasibility study to 50 percent of the sponsor share (or 25 percent of the entire study). AAPA supports amending WRDA 86 to allow the entire project sponsor study cost share to be provided in-kind services. This amendment is in keeping with our equal partnership objective and our responsibility for 'project proponency.'

Mitigation Land Purchase Cost Sharing. The Corps has determined that land purchased for mitigation purposes is a 100 percent local cost which can be offset from the ten percent repayment. Section 906(c) of WRDA 86 states that costs incurred for mitigation "shall be allocated among authorized project purposes in accordance with applicable cost sharing allocation procedures, and shall be subject to cost sharing or reimbursement to the same extent as other project costs are shared." The clear intent of Congress has been undermined by the Corps in their interpretation and should be clarified so that land purchases for mitigation are subject to Section 906(c). Alternatively, and with similar effect, land costs could be accounted for the same way local costs are for flood control projects, as part of the total project cost before cost sharing. This change also should help encourage better environmental mitigation.

Mr. Chairman, thank you for your introduction of this most important legislation and for your leadership in both the water resources program as well as you concerns for our Nation's infrastructure in general. This committee is well aware of the tremendous economic impact of the public port industry, as well as the vital role ports play in our national defense. The maintenance and development of our Nation's deepdraft navigation system is an essential component of the port's ability to perform their role. Thank you for the opportunity to present our views to the Committee today.

BOLESLO LOVATO
MAYOR
GILBERT GARCIA
MAYOR PRO TEM
BONNIE LOPEZ
CITY MANAGER
SALLY G. GARLEY
ADMINISTRATIVE ASSISTANT
JOSE R. PENA
PUBLIC WORKS DIRECTOR

CITY OF BELEN
525 BECKER AVENUE
BELEN, NEW MEXICO 87002
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February 23, 1990

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John W. Warner, VA
James M. Jeffords, VT
Gordon J. Humphrey, NH
Dave Durenberger, MN
John H. Chafee, RI

Chairman and Members of the Committee:

Thank you for this opportunity to explain our great need and to extend a special thanks to Senator Pete Domenici and Jeff Bingaman for their assistance and support in this project.

We are in desperate need of this flood control project in Belen, New Mexico. The lack of flood control in Belen has discouraged citizens from rebuilding in the areas devastated by the 1969 flood. This has led to many vacant lots, loss of interest by property owners, and twenty years of stagnation and decay of this section of Belen. There is reluctance in all commercial and residential areas of Belen to develop and improve structures because of the absence of a flood control project. The City of Belen is still reconstructing streets that sustained subgrade failure due to several feet of water standing for several days.

Background information:

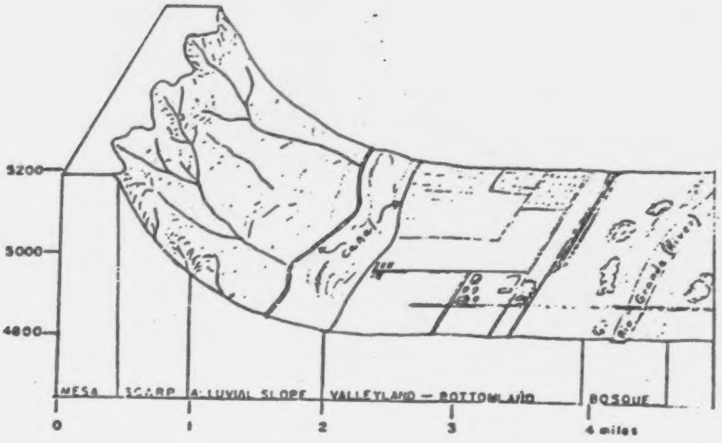
Physical data

The City of Belen is located 32 miles south of Albuquerque. Belen lies mainly in the bottomland and is situated in the Rio Grande Valley.

Soils

The mesa soils are loamy to sandy, being nearly level to undulating and are very susceptible to wind and water erosion. The soils of the scarp are classified as badlands, being highly eroded and stratified with texture ranging from clays to gravel. Bottomlands are predominantly deep clay layers or loamy soil.

Shape



Block Diagram of the Watershed Showing Position and Elevation of Types of Land Within the Watershed

Climate

Flood water damage

Floodwaters originate in the scarp and alluvial slopes of the upland area during high intensity thunderstorms. Most of the floodwater is intercepted by the Belen Highline Canal that crosses the watershed just above the valley lands. Storms with 4 percent chance of occurrence or less are substantially controlled by this Canal except at the north edge of the watershed. Here the Belen Highline Canal is siphoned under an arroyo and floodwaters flow into the valley. Large storms breach both the Belen Highline Canal and the New Belen Ditch in a number of places allowing the floodwater plus the water in the canals to flow through and onto the urban and agricultural lands. Flood flows generally last around an hour, but flows from the canals will continue for hours because the control gates are located more than 13 miles above the watershed. Water from breaks in the canal flows through the urban and irrigated areas below the canals, eventually ponding in low places. This ponding occurs in the low areas west of the railroad yards where the water stands for many days. Most of the deeper ponding occurs in the City of Belen. Ponding not only causes damage but creates health hazards such as mosquitoes, water stagnation, and sewage pollution.

Solutions

Eight alternate plans were developed during the course of the 1984 DPR study. The recommended plan is to enlarge the highline canal so that flooding west of the canal could be diverted to the south and away from the community before it has a chance to pond in the downtown areas of Belen. Flood waters would be diverted south to Feeder Canal No.3, about six miles south of Belen, and then east to the Rio Grande so as not to induce damages further downstream. Total costs associated with providing 100 -year degree of protection are $19,576,000. In addition to rebuilding and enlarging approximately eleven miles of the canal, this cost includes 15 sediment control basins adjacent to arroyo inlets into the Highline Canal, relocation of 12 bridges and 12 gate structures, enlarging two drop structures on Feeder No. 3, and the acquisition of 146 acres of land. This alternative would provide extended protection to the area between Belen and Feeder Canal No.3 due to enlarged canal section required to carry the extra flows from the north.

To summarize, the flood problem in Belen originates from three sources. Two of these sources, the flows from the west mesa and subsequent flows from the Highline canal, are interrelated. When flows from the west mesa reach a certain volume they are intercepted and carried away by the canal to eventually enter the Rio Grande to the south. Once flows from the west mesa exceed the canal capacity (or deposit enough silt to block the canal) a breach in the canal will occur at a random location. Depending upon the location of the breach, floodwaters will enter Belen. The third source of flooding is caused by the lack of interior drainage in Belen itself. There are several storm sewer systems consisting of open ditches, but, because Belen is situated in a low area without gravity flow to the river there isn't anywhere for the ditches to drain and they turn into open ponding areas.

Problem

The value of the properties in the Belen flood plain is approximately $162,707,000. (May 1988 values). The Corps of Engineers currently estimates that a standard project flood would cause damage in excess of $41,000,000. to Belen.

The costs for this project, are $19,576,000. This figure, when annualized at 8 5/8% over the 100-year life of the project, is $1,688,000. The estimated annual maintenance, $32,000. is added to this number, and the total annual average cost of the project becomes $1,720,400.

In order to calculate the cost to benefit ratio of this plan the average annual costs are divided by the average annual benefits:

$1,435,700/$1,720,400. = .83

For the Corps to participate in a project, Congress has determined that a project must have a cost to benefit ratio of at least 1. As in the 1984 report this plan, the optimum plan under the Corps planning guidance, is not justified and therefore no Federal interest is allowed.

Attached are letters of support from a few organizations that have expressed strong support for this project. The Corps of Engineers estimates that 4.9 acre feet of soil per square mile of watershed are being lost annually to water erosion due to lack of a flood control project in Belen. This loss compounds many other problems dealing with silt and soil erosion.

Congress has the power and authority to relax the cost/benefit ratio requirement. Citizens of Belen, New Mexico are desperate for relief from the annual flood threat. We have a right to peace of mind; we have a right to protections from this re-occurring disaster. We are sure that there are many flooding situations in the United States that do not have solutions. Belen's floods are preventable with this legislation. Through taxes, citizens in Belen have helped build flood control projects all over the country, now, it's our turn. We pray that the Sub-Committee on Water Resources, Transportation, and Infrastructure give a Do-pass recommendation to Senate Bill 923.

Sincerely,

Gilbert Garcia

Gilbert Garcia
Mayor Pro-Tem
Chairman of Public Works

GG/jb

Enclosures

NEW MEXICO STATE HIGHWAY
AND TRANSPORTATION DEPARTMENT
AN EQUAL OPPORTUNITY EMPLOYER

DISTRICT THREE OFFICE

GARREY CARRUTHERS
GOVERNOR

COMMISSION

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Member, Las Cruces

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Secretary
Dewey Lonsberry

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505-827-9500

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Milan, N.M.
87021
505-285-6623

February 22, 1990

Mr. Gilbert Garcia, Mayor Pro-Tem
City of Belen
524 Becker Avenue
Belen, New Mexico 87002

Dear Gilbert:

After spending the past twenty plus years actively involved in highway maintenance in the Belen area, I am well aware of the numerous and disastrous consequences of flooding that has occurred in Belen, New Mexico.

I wholeheartedly support the city's efforts to obtain funding that will alleviate this problem, not only for the residents, but also from the potential damages to Interstate 25 and the other state highways in this area.

If there is anything I can do to help the city, please feel free to call at anytime.

Sincerely,

D. G. Arp

D. G. ARP
DISTRICT HIGHWAY
AND TRANSPORTATION
ENGINEER

:sv

AMERICAN PUBLIC POWER ASSOCIATION
2301 M STREET NW WASHINGTON DC 20037 · 202/467-2900

Statement of the
AMERICAN PUBLIC POWER ASSOCIATION
before the
SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION, AND INFRASTRUCTURE
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
on
S. 2183, Water Resources Development Act of 1990

March 1, 1990

The American Public Power Association strongly supports the inclusion of section 308 in the Water Resources Development Act of 1990. This provision is necessary to ensure that federal water projects constructed by the U.S. Army Corps of Engineers are operated within the parameters established by Congress.

APPA is the national service organization representing more than 1,750 locally owned public power systems. Approximately 500 of these public power systems -- in addition to more than 600 rural electric cooperatives -- purchase power generated at federal multipurpose water projects, including 73 projects constructed and operated by the Corps of Engineers.

As this Committee knows, when new federal water projects are proposed, specific purposes are authorized and costs are assigned to each purpose. Some costs are reimbursable -- repaid by the beneficiary group -- while others purposes are deemed non-reimbursable. Federal power customers repay in full -- and with interest -- the federal investment in hydropower facilities. In fact, this repayment responsibility was central to making construction of these multipurpose facilities economically feasible, with power customers repaying, on average, more than 60 percent of the capital costs of constructing these projects.

Federal power customers recognize that many of these projects have fostered uses unanticipated -- and not authorized -- when these projects were first considered. Often these unauthorized uses -- such as recreation and water supply -- reflect growing social and economic values.

Federal power customers are willing to accommodate the objectives of these unauthorized project interests, provided that this is achieved under equitable terms and through an open and deliberative process. As articulated in the attached report prepared by an APPA task force in response to these emerging conflicts among project interests, federal power customers believe that beneficiaries of authorized project purposes should be fully compensated for the value of any benefits transferred to beneficiaries of new or expanded project uses. As this Committee is aware, this approach was successfully employed in resolving a conflict between water supply and power interests at Denison Dam, and it is being used as a model to resolve other disputes.

Unfortunately, this equitable approach to conflict resolution is being frustrated and undermined by the cavalier actions of the Corps of Engineers. In the Southeast, the Missouri Basin region, and elsewhere, the Corps is seeking to manage federal water projects with seemingly unbounded discretion that has resulted in:

- uncertainty for project users;
- inconsistencies in Corps policies and their implementation;
- unbalanced water management practices; and
- de facto reallocation of project reservoirs and benefits without congressional authorization or public involvement.

In the Southeast, the Corps has altered arbitrarily the operation of the Georgia-Alabama System projects to the detriment of beneficiaries of congressionally authorized purposes. Without congressional authorization or review, the Corps has added new categories of project beneficiaries and altered the operation of projects to advance unauthorized uses. Similarly, the Corps' response to severe drought conditions in the Missouri Basin has triggered demands for a basin-wide review of the Corps' operating standards and suggests that certain operating decisions should be initiated only after consultation with the affected parties.

While the Corps should be allowed sufficient discretionary authority to respond to extreme emergency conditions and make truly minor adjustments in response to changing hydrologic conditions, that authority is properly bounded by the congressional authorization for a project and the documents that support and implement that authorization. The authority to add new project purposes, reallocate project storage or benefits, or significantly alter project operations is vested exclusively in Congress.

APPA has testified previously before this Committee to raise concerns about the Corps exercise of excessive discretionary authority. In response to those concerns, section 5 of the Water Resources Development Act of 1988 was enacted. This provision was designed to provide project beneficiaries certain due process rights prior to the implementation of significant actions by the Corps. Unfortunately, the Corps has not lived up to the letter or spirit of this requirement.

Section 308 of S. 2183 would establish a procedure for the Corps to follow prior to implementing any changes in operation of federal water projects. This provision is necessary to ensure that such changes are consistent with congressional intent and that those parties who are affected by the Corps' operations have an opportunity to participate fully and formally in the Corps' decision-making process. It is not our intent or desire to micro-manage the activities of the Corps. However, it is essential that the Corps' activities, and discretionary authority, remain within the boundaries set by Congress. This provision simply would ensure that the Corps discretionary authority remains within those congressionally established parameters. Further, this provision would ensure that any reconsideration of project operations and purposes be pursued through an orderly, open, and equitable process rather than being implemented by administrative fiat.

APPA appreciates the inclusion of section 308 in this legislation, and we look forward to working with the Committee to resolve this vexing problem that frustrates proper management of the nation's water resources.

Statement of The Associated General Contractors of America

Presented to the

Water Resources, Transportation and Infrastructure Subcommittee

of the

Environment and Public Works Committee United States Senate

On the Topic of

1990 Water Project Authorizations

April 2, 1990

AGC is:

- More than 32,500 firms including 8,000 of America's leading general contracting firms responsible for the employment of 3,500,000-plus employees;
- 102 chapters nationwide;
- More than 80% of America's contract construction of commercial buildings, highways, industrial and municipal-utilities facilities.

The Associated General Contractors of America
1957 E Street N.W., Washington, D.C. 20006-5199, (202) 393-2040, Fax (202) 347-4004

The Associated General Contractors of America represents more than 32,500 firms including 8,000 of America's leading general contracting companies. These general contractors are responsible for the employment of more than 3,500,000 workers, and perform more than 80% of America's contract construction of commercial buildings, highways, heavy-industrial and municipal-utilities facilities.

The Associated General Contractors of America endorses prompt action on water project authorizations this year. Such action is necessary to continue the orderly and regular Congressional leadership on water resources issues established by enactment of the Water Resources Development Act of 1986 and the 1988 follow-up legislation.

Federal water programs have enhanced entire multi-state regions by providing flood protection, water transportation and recreational opportunities. Historically, irrigation and hydropower projects have stimulated regional economies, by providing incentives for business and agricultural capital investment.

National security is another crucial, though infrequently-mentioned, aspect of the nation's water resources. Navigable channels, electricity for production and adequate supplies of water are vital to the country's defense.

In the early 1800's, this nation's forward-thinking leadership recognized the necessity for taming uncontrolled river basins, which periodically threatened life and property, into useful and productive systems essential to manufacturing activity and economic growth. The nation has benefited and so have the states. The system has worked well because federal leadership and coordination have made it work.

Today, U.S. ports and waterways are integral to the transportation of the goods produced and used by America's agricultural sector, industries, and consumers. In

1988, international shipments rose 16 percent. The value of exports increased by 50 percent over the three-year period from 1985 to 1988; the value of imports rose 28 percent.

Because of this increased activity, expansion and modernization of the nation's ports and waterways is required and will demand investment in a number of projects. On the inland waterway system, a number of locks and chambers are so old that they require major rehabilitation or replacement. For seaports, modernization is necessary to achieve transportation cost savings for a number of ports with depths of less than 50-55 feet. Recognizing these ongoing needs, the Water Resources Development Act of 1986 and 1988 authorized over 38 projects which should be constructed to deepen and/or widen channels in these ports, at a total cost of over $2.7 billion.

AGC notes that the Congressional proposals presently under consideration do not attempt to undo the overall policy on water resources issues which were established in the 1986 Act, and the 1988 follow-up legislation. AGC continues to strongly support this overall policy which includes the concepts of cost sharing and user fees.

In closing, AGC applauds this Committee's continuing efforts to meet water resource needs and the commitment to work for regular biennial water resources authorizing legislation. AGC looks forward to working with the Committee as it develops this year's legislation.

MAPPS

Management Association
for Private
Photogrammetric Surveyors

March 2, 1990

Senator Daniel Patrick Moynihan, Chairman
Senator Steve Symms, Ranking Minority Member
Subcommittee on Water Resources,
Transportation and Infrastructure
Committee on Environment and Public Works
Washington, DC 20510

Dear Senators:

The Management Association for Private Photogrammetric Surveyors (MAPPS), a national trade association of private surveying and mapping firms, commends you for introducing S. 2183, "the Water Resources Development Act of 1990", and respectfully requests that this statement be inserted in the record of your March 1 hearing.

MAPPS member firms provide a variety of professional engineering-related services to the Corps of Engineers in support of the water resources program. This includes surveying, hydrography, mapping, aerial photography, remote sensing, geodesy, and geographic information systems services.

We commend the Corps for its enlightened and progressive approach to utilization of private sector firms in its water resources program. The Corps maintains a reasonable in-house capability in these areas, yet contracts to the private sector for a significant percentage of its requirements. While there is certainly room for more contracting and notwithstanding that we have had our differences with the Corps on some specific incidents and would encourage even greater utilization of private firms, we believe this balanced approach gives the government the best of two worlds.

First, the Corps has an in-house capability that affords the agency an ability to conduct research and development on new techniques and methodologies. Moreover, preserving a small but qualified in-house staff permits the Corps to keep the expertise it needs to award and manage contracts, perform a minimal amount of production serves to keep its staff current with state of the art practice, establish standards, and serve as the basis for a mobilization in the event of a national emergency.

On the other hand, the Corps' extensive use of private, professional firms as contractors provides a significant market for the private sector. This affords firms an opportunity to work on large scale projects that stimulate private sector

John M. Palatiello, Executive Director

12020 Sunrise Valley Drive, Suite 100, Reston, Virginia 22091 (703) 391-2739

employment, growth, innovation, capitalization and other benefits that enhance the U.S. economy. Additionally, this experience is valuable to U.S. firms as they endeavor to export U.S. engineering services to the international marketplace.

MAPPS has been working with the Office of Management and Budget to persuade Federal agencies to increase the amount of surveying and mapping work they accomplish by contract, rather than by Federal employees. In our discussions, we have repeatedly pointed to the Corps of Engineers as a model. We believe the Corps is an example of how an agency can maintain an basic in-house capability, yet engage in significant utilization of the private sector. To illustrate our point, we have noted that the Corps entered into an inter-agency agreement with the Environmental Protection Agency to manage EPA's surveying and mapping requirements for the Superfund program. The Corps is contracting out all Superfund surveying and mapping requirements to the private sector. This provides EPA with highly qualified private sector professional assistance, while employing the Corps' technical and administrative expertise in contract management.

Despite this balance between in-house government activity and utilization of the private sector, the Corps has been forced to begin OMB Circular A-76 studies on its architecture, engineering, surveying and mapping functions. Circular A-76 is an OMB initiative which requires agencies to conduct detailed and time consuming comparisons between the cost of performing an activity with Federal employees and the cost of contracting with a private firm. If the private sector proves less costly, the agency activity is closed down and converted to contractor performance.

We are concerned about Circular A-76 being applied to the architecture, engineering, surveying and mapping functions of the Corps for a number of reasons.

1) The initiative is mis-placed. The Corps contracts for nearly 75 percent of its surveying and mapping requirements. Some other Federal agencies contract for less than 10 percent of their surveying and mapping requirements. We believe OMB should be pressuring these recalcitrant agencies, not the Corps.

2) A-76 would eliminate the Corps' basic engineering capability. A-76 is an all or nothing at all proposition. If the private sector wins the cost comparison, the entire function is contracted. The agency is not permitted to maintain even a basic in-house skeleton staff. We believe the current system of keeping a small in-house staff and providing extensive contracting opportunities to the private sector works well.

3) The A-76 process is inconsistent with the "Brooks Act". Federal law requires agencies to select contractors for architecture, engineering, surveying and mapping services on the basis of their "demonstrated competence and qualifications" subject to negotiation of a fee that is "fair and reasonable to the government" (SEE 40 U.S.C. 541). A-76 requires a contract to be awarded to the lowest bidder. The inconsistency between the Brooks Act requirement for qualifications based selection and the A-76 requirement for a low bid award has not been reconciled. Moreover, we are confident the Committee would not want to see the Corps' engineering-related activities turned over to the lowest bidder!

Attached is an amendment we suggest to S. 2183. This amendment exempts the Corps from OMB Circular A-76 for architectural, engineering, surveying and mapping, yet encourages the continued and increased utilization of private firms.

We believe this amendment provides the necessary balance between the Corps need to maintain a in-house engineering nucleus with the private sector's desire to work as contractors to the Corps. Moreover, it provides for measured increases in contracting for these services, rather than the Draconian approach of A-76.

MAPPS has said in numerous forums that the Corps of Engineers is the best Federal client. More firms compete for Corps of Engineers contracts than for those of any other Federal agency. We support the current system and believe our amendment will preserve and enhance that partnership which exists between the Corps of Engineers and the private engineering-related services community. While we strongly support more contracting out, we do not believe that in this case A-76 is the proper mechanism for achieving that goal.

We thank you for this opportunity to bring this matter to your attention and urge the adoption of our amendment.

Sincerely,

John M Palatiello

John M. Palatiello
Executive Director

Attachment

Proposed Amendment to
S.2183

Sec. ___ PRIVATE SECTOR UTILIZATION

Sec. ___ (a) None of the funds authorized by this or any other Act may be used by the Secretary to conduct a study of architectural, engineering, surveying or mapping services pursuant to Office of Management and Budget Circular A-76 (or any successor administrative regulation or policy).

(b) In lieu of the study referred to in paragraph (a) of this section, the Secretary shall develop and implement a plan to increase the utilization of and provide for additional contract opportunities for qualified and competent private, professional firms to supplement the capabilities of the Corps of Engineers for such services.

Middle Rio Grande Council of Governments of New Mexico
317 Commercial N.E., Suite 300 • Albuquerque, N.M. 87102-3429 • (505) 247-1750

February 23, 1990

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Valley Improvement Association Inc.

Albert [illegible]
Executive Director

12/89

Senator Daniel P. Moynihan
464 Russell Building
Washington, D.C. 20510

SUBJECT: Senate Bill 923 - 201 st Congress - First Session Which Intends to Authorize Flood Protection for the City of Belen, New Mexico

Dear Senator Moynihan:

The Middle Rio Grande Council of Governments, an association of local governments in the four-county area of Sandoval, Bernalillo, Torrance and Valencia, fully supports and encourages the subject bill and has recognized the extreme need for providing flood protection for the area in and around the City of Belen, New Mexico.

The MRGCOG is particularly concerned because Belen, New Mexico is an important members of our family of communities experiencing rapid grown and development in the central area of New Mexico.

Belen's long-range development objectives are clearly the development of a composite community which includes industrial, commercial and residential development which will compliment the City of Albuquerque to the north and the entire area south towards Las Cruces and El Paso.

We have, and continue to, make extensive efforts in economic development and investments of both Federal, State, and local resources which enhance the viability of the City of Belen and its environments. Adequate flood protection is vital to the continued well being and the enhancement of desirable development in the Middle Rio Grande area of New Mexico.

An Association of General and Special Purpose Units of Local Governments within New Mexico State Planning and Development District III

It is the collective view of the MRGCOG and its members that expenditure of the proposed Federal funds is absolutely essential to the Middle Rio Grande area as a positive impact for the entire State of New Mexico.

Sincerely yours,

Carl R. Allen
Mayor, Village of Bosque Farms
Chairman, Board of Directors,
MRGCOG

STATEMENT OF NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION

Congressional Authority Over Federal Water Resource Project Management

Subcommittee on Water Resources, Transportation and Infrastructure
Committee on Environment and Public Works
United States Senate

March 1, 1990

Mr. Chairman, my name is Morgan Dubrow, Chief Engineer of the National Rural Electric Cooperative Association (NRECA). NRECA is the national association of over 1000 rural cooperatives which supply central station electricity to some 25 million people in the rural areas of 46 states.

I appear in support of Section 308 of the Water Resource Development Act. This proposed bill would require the Corps of Engineers to follow an orderly and disciplined process in making changes to reservoir operations at federal water resource projects.

Our members that purchase federal power are experiencing in the Southeast and other regions of the country changes in project operations to accommodate competing uses. These changes are being made at the expense of the hydropower customers who repay some 80 percent of the project costs.

Any reduction in power output from the project increases the cost of federal hydropower. NRECA's position on the proposed legislation is fully covered in the following resolution adopted by the NRECA memberhip on February 7, 1990:

RESOLUTION

Federal Water Resources -- Change of Purpose and Reallocation

There are currently under consideration various proposals to divert water out of the federal hydroelectric reservoir projects for industrial, municipal, navigation, recreational, fish and wildlife, and other uses.

Many rural electric cooperatives and public bodies receive power generated at federal projects operated by the U.S. Army Corps of Engineers and the Bureau of Reclamation, and sold by the Power Marketing Administrations. Congress authorized these projects on the basis of benefit-to-cost ratios and repayment schedules that assumed specified levels of revenues for hydropower generation. Many rural electric cooperatives supported the construction of these projects and signed contracts that assure the repayment of the federal investment in hydropower generation.

The long-term generation plans of many rural electric cooperatives and public bodies rely on their contractual and statutory rights to this federally marketed hydropower. We oppose reallocating reservoir use or capacity to unauthorized project purposes or adding new project purposes if the result is a decrease in the capacity and energy produced by these projects, unless the following elements are included:

1. Assurance that preference customers will receive, in both the short and long-term, compensation in the form of replacement costs for loss of capacity and energy as a result of reallocation on the reservoir to any new or existing project purposes;

2. Enactment of a system of fees or other payments from the beneficiaries of any reallocation of the reservoir so that the current repayment schedule for the project is maintained;

3. Assurance that any agreement is consistent with and protects originally authorized purposes;

4. Assurance that the authority of the Corps of Engineers and Bureau of Reclamation to operate the projects on a day-to-day basis to meet both authorized purposes and emergency needs is not impaired;

5. Case-by-case Congressional approval of reservoir and project cost reallocation to assure that the above commitments are kept, compensation is adequate, the reallocation is equitable and appropriately considers integrated system operations and the addition of project purposes does not render the project uneconomic or jeopardize hydro use or jeopardize repayment of the U.S. government investment;

6. Assurance that the power customers' contractual benefits be preserved. This can be achieved by compensation for any power and energy foregone. Determinations with respect to capacity and energy foregone and the value thereof, including the cost of replacement power, are the basis on which compensation must be determined and the level of alternative revenues required established. If the Power Marketing Administrations are responsible for replacing power foregone, then they should determine such computation. If the power customers are responsible, then the customers should determine such computation;

7. Assurance of notice and opportunity to comment, on a project-by-project basis, on any recommended modification of authorization, prior to transmittal to the Congress; and

8. No change in project operation to accommodate purposes not initially authorized is to occur prior to enactment of the lelgislative proposal. Assurance that during the period betwseen enactment of the legislative proposal and the authorization of the reallocation of the reservoir for additional project purposes, the projects will be managed in accordance with the purposes for which the projects were initially authorized.

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A further example of problems caused by the operation of reservoirs by the Corps of Engineers is set out in the following resolution, also approved on February 7, 1990:

RESOLUTION

Missouri Basin Reservoir and River Levels

The drought of 1988-89 has cuased record low water run-off into the Missouri River Basin. The resulting low river flows and reservoir levels behind Garrison and Oahe Dams caused severe economic hardship to the Upper Missouri Basin states.

The U.S. Army Corps of Engineers' decision regarding reservoir operations has ignored the concerns of Upper Basin states and has worsened the already devastating impact of the drought in the Upper Basin.

We call upon the U.S. Army Corps of Engineers to observe the intent of the O'Mahoney/Milliken amendment (1(b) of the Flood Control Act of 1944) in protecting beneficial consumptive use of Missouri Basin water. We strongly urge the Corps of Engineers to balance the impacts of water releases on all Pick-Sloan states between the Upper and Lower Basins.

- - - - - - - - -

The above resolutions set out the problems and provide remedies for our member systems when water is held in hydroelectric reservoirs or diverted for other unauthorized uses. The resolutions also spell out that any unauthorized purpose should be approved by the Congress on a case-by-case basis and provide remedies to compensate the power users for loss of power which results from changes in reservoir operations.

NRECA believes that Section 308 of the proposed bill will provide the opportunity for all affected parties to comment on proposed changes, and require the Corps of Engineers to determine whether the proposed changes are reflecting the economic benefits. Most importantly, it would require Congress initial authorization for any water control plan which is inconsistent with the cost-benefit analysis relied on in approving these projects.

Thank you for the opportunity to submit comments of our association.

TESTIMONY PRESENTED TO
THE UNITED STATES SENATE
WATER RESOURCES, TRANSPORTATION, AND INFRASTRUCTURE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

BY

JAMES D. PUGH

EXECUTIVE DIRECTOR

PORT OF HOUSTON AUTHORITY

MARCH 1, 1990

Mr. Chairman and members of this subcommittee, thank you for allowing us the opportunity to submit written testimony concerning the Port of Houston Channel improvement project.

Gentlemen, we are eager to present this project to Congress, as it has been a 23-year endeavor. This Houston Ship Channel improvement project has been under study and consideration by the United States Army Corps of Engineers since 1967 when the Congress authorized examination of the proposed improvements. The Port of Houston Authority is the local sponsor for the project and is committed to its completion.

The decision in 1967 to undertake this project was based on a sound vision of what would be needed for the Port of Houston to remain a competitive and safe port. In view of the economic crunch Houston suffered and from which we are beginning to recover, those reasons are even more viable today. There are three very basic reasons this project is so vital: 1) safety; 2) economic impact; 3) environmental improvements.

Let's examine each of these factors. The Port of Houston Authority's mandate is "To provide the benefits of deep draft navigation to the citizens of Harris County". To accomplish this task, without regard for the safety of the people who utilize the channel would be irresponsible. During more than 20 years of study, ships have gotten larger and the space between them as they meet or pass in the the channel has decreased. It is due to the expert skill of Houston pilots that a major collision has not occurred. We do not want to extend the demand on those skills any further. Accidents do occur. It is our job as sponsor of the Houston Ship Channel to minimize the factors affecting an accident on the channel. Widening the channel from 400 to 530 feet will assist in our efforts to minimize the contributing factors to accidents. Avoiding an oil spill that might result from a collision in the bay is of grave concern to us. In view of the recent disaster in Prince William Sound, we cannot place enough emphasis on the importance of the improvements to safety that this project would accomplish. Each year, nearly 5,000 ocean-going vessels and 30,000 barges navigate the Houston Ship Channel. These improvements will double the passing area for the large ships. Houston Pilots have heavily endorsed this project. We need to remember, gentlemen, that these ships are manned by fellow human beings who deserve to execute their jobs with a minimum of risk.

As I mentioned earlier, and of which I am sure you are aware, Houston has been struggling to recover from a severe economic crunch. The Port of Houston is a major factor in accelerating Houston's recovery. The Port of Houston generates an annual impact of $3 billion per year into the Texas economy, affecting more than 160,000 jobs in the state as well. Studies have estimated that the project by 2025 would create an additional 9,000 jobs and would boost the local economy by $2.5 billion. The project would allow ships currently calling the port to be fully loaded, reduce transportation unit costs and accommodate larger ships. The primary beneficiaries of these improvements would be crude petroleum, grain, petrochemicals and, over the long-term, containers. These cargo markets have, since 1974, represented a relatively constant three quarters of the international water borne trade through the Port of Houston. It is not difficult to ascertain the effect on the national economy that the reduced cost of import crude oil and the increased export capability would allow. A recent Corps of Engineers report calculates the benefits of the project at approximately $42 million per year beginning in September of 1999 should the project proceed as planned. If, however, delays are experienced, the national economic loss in benefits is estimated at $2,500,000 the first year, escalating to $13,800,000 the third year.

These benefit loss figures are related to the reduction in vessel operating costs, delays and casualties that would result from the realization of this project.

There has been much speculation regarding the proposed environmental impact of this project on Galveston Bay. The operative word here is speculation. Being men of integrity and intelligence, I am certain that you respond to facts rather than speculation and the facts regarding the environmental impact of this project simply stated are that contrary to "speculation" that it will reap harm upon the environmental condition of the bay, it will in fact foster environmental improvements. First and foremost, as I mentioned earlier, the reduction of the risk of a major oil spill is a direct and immediate benefit of the widening of the channel. In addition, the project includes the creation of islands and wetlands in Galveston Bay. The creation of these areas will provide bird and fish habitat while enhancing commercial fishing. The channel is continually dredged. This has been the norm for decades. Yet, Galveston Bay is one of the most productive bays for fish and oysters in the United States. In 1966 when the 40 foot project was completed, the commercial catch in Galveston Bay was 7.9 million pounds with a value of $7.5 million. In 1986, the catch was 13.2 million pounds with a value of $15.1 million. This is not an either/or situation, Gentlemen. Navigational improvements and a healthy environment are not mutually exclusive. To the contrary, our project will enhance and improve the environment in Galveston Bay.

This project has received many important endorsements. To name a few: Governor of Texas, Bill Clements; Mayor of Houston, Kathy Whitmire; Harris County Judge, Jon Lindsay, the Harris County Board of Commissioners, the Houston

Chamber of Commerce, the Houston Economic Development Council, and the International Longshoreman's Association. In addition, it has received the overwhelming support of the people - constituents. In the November 1989 bond election, over 63% of the voters in Harris County - people who fish, enjoy boating, own homes on the beach - weighed the facts - the improvements to safety, the environment and the economic benefits to the nation and their city, in particular, and voiced their support of the project by approving the sale of $130 million in bonds to fund the Port's portion of the cost. The people have spoken - loudly.

Finally - and perhaps, most importantly, this project has been probed for 23 years with microscopic eyes by the Corps of Engineers, the EPA, and the consultants. Every morsel of impact - economic, safety and environmental has been examined and analyzed. We are absolutely convinced, as is the Corps of Engineers, that every aspect of the project has been studied, reviewed, studied again, reviewed again - enough is enough. There has been enough time, energy, and more than enough money spent to study the effects of the project. We are absolutely committed to seeing this project completed. We are comfortable with the compromises that have been reached and see no reason for further delay. While we certainly do not want to entertain another delay by having the project referred to CEQ, we are not afraid of the scrutiny that agency or any other might engage in studying the project. If that is what it will take to keep this project progressing through the Congressional process - then so be it. But one thing is crystal clear. This project _must_ receive Congressional authorization, now.

Safety demands it and the promise of the economic benefits embrace it.

We most adamantly request its inclusion in the Senate Water Resources Bill. This nation and particularly the people who's livelihood's depend on the Houston Ship Channel remaining a competitive and vibrant port are depending on you to keep the wheels moving.

Thank you for your interest and your consideration of our request.

MIDDLE
RIO GRANDE
CONSERVANCY
DISTRICT

February 23, 1990

To: Senator Daniel Patrick Moynihan, Chairman
Members of the Subcommittee on Water Resources Transportation and Infrastructures

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Mr. Chairman and Committee Members:

The Middle Rio Grande Conservancy District, a political subdivision of the State of New Mexico, encompasses four counties in the Middle Rio Grande Valley (Sandoval, Bernalillo, Valencia and Socorro). It provides services such as irrigation, subsurface drainage and flood protection from the Rio Grande.

The City of Belen is sheltered on the west by the Belen Highline Canal, an irrigation facility owned by the MRGCD. The District has suffered substantial damage to the Belen Highline Canal and other facilities due to uncontrolled arroyo runoff from the west mesa. It has caused random ditch breaks and flood damage to residents and properties east of the canal. The excessive amount of silt deposits in our facilities and the Rio Grande due to arroyo runoff is a major concern.

Senate Bill No. 923 protects the facilities of the MRGCD and the City of Belen. The MRGCD must be involved in the design phase of the project in order to avoid any adverse impact to its facilities.

The Middle Rio Grande Conservancy District whole-heartedly supports S-923 and the enthusiasm and commitment of the citizens of Belen. We wish to thank you all for your kind consideration on S-923.

Sincerely,

Subhas K. Shah
Acting Chief Engineer

SKS:kr

xc: Mr. Gilbert Garcia
Mayor Pro Tem, City of Belen

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GEORGE USRY
Athens TN UB

BILLIE B. WRIGHT
Amory MS W&E

CARLOS C. SMITH
General Counsel

An organization of municipally
and cooperatively owned electric power
systems purchasing power from the

February 28, 1990

The Honorable Quentin N. Burdick
United States Senate
Washington, D. C. 20510

Dear Senator Burdick:

On behalf of the Tennessee Valley Public Power Association ("TVPPA"), which represents the interests of the 160 consumer-owned electric utilities that buy power from the Tennessee Valley Authority and distribute it to eight million consumers throughout the Valley, I am writing to urge support for section 308 of the water resources authorization bill. This provision proposes a fair, open and principled decisionmaking process for the U. S. Army Corps of Engineers in its management of federal water resources projects.

As you know, the Corps operates numerous federal projects throughout the country, including a number in the Southeast which provide power to TVPPA members through TVA. In the past several years, particularly in light of the drought, the Corps of Engineers has altered project management to accommodate non-authorized users, such as recreation and new water supply needs in growing areas. While power customers do not dispute the need to adapt water management to accommodate water shortages, the Corps' decisionmaking process has frequently ignored congressional project authorizations; the federal government's contractual obligations; and impacts on downstream users, who have relied upon historical levels of releases to meet downstream water supply, water quality and recreation needs.

We believe that the Corps should be required to follow a more disciplined approach to project management, which recognizes congressional limitations on Corps' discretion in operating projects; the importance of economic analysis of alternative operating methods; the need to assure repayment of project investment; and the need to review the impact of changes in operation on authorized project users. I encourage you to support the proposed legislation which establishes these principles.

Respectfully submitted,

Jerry Campbell

Jerry L. Campbell
Executive Director

pap

Valencia County Commissioners

ALBERT OLGUIN
CHAIRMAN

MANUEL OTERO
VICE-CHAIRMAN

SALOMON MONTANO
MEMBER

JOE G. MAESTAS
COUNTY MANAGER

P.O. BOX 1119 • LOS LUNAS, NEW MEXICO 87031 • PHONE (505) 865-4900

February 23, 1990

Honorable Senator Daniel P. Moynihan, Chairman
and Members of the Sub-Committee
Washington, D.C.

Mr. Chairman and Members of the Sub-Committee:

Valencia County is well aware of the difficulties imposed by a constant flood threat on the western-side of Belen. The Valencia County Commissioners, Valencia County Manager's Office and Citizens of Valencia County ask that the Sub-Committee give favorable treatment to Senate Bill #923, known as the "Belen Flood Control Bill".

Please do not hesitate to contact this office if any questions or concerns may arise.

Thanking you in advance.

Sincerely,

Joe G. Maestas
Valencia County Manager

xc: Board of County Commissioners
file

CITY OF
BELEN

VALLEY
IMPROVEMENT
ASSOCIATION

FIRST
NATIONAL
BANK OF
BELEN

VALENCIA
COUNTY
COMMISSION

PUBLIC
SERVICE
COMPANY
OF
NEW MEXICO

February 23, 1990

The Honorable Daniel Patrick Moynihan,
Chairman, and Members of the
Subcommitte of Water Resources,
Transportation and Infrastructure
Washington, D.C.

Dear Senator Moynihan and Members:

At their February, 1990 meeting, the Board of Directors of the Valencia County Economic Development Corporation unanimously agreed to lend their support to the City of Belen in its efforts to obtain funding for a much needed flood control project.

Although we have been successful in our economic development efforts in certain locations of the greater Belen area, we have found that we have not been able to encourage new industry to locate in the areas that were devastated by the 1969 Belen flood for fear of a reoccurance.

These areas have not been considered for development and will continue not to be considered unless a flood control plan is implemented.

The City of Belen is totally committed to the promotion of economic development and would like to encourage the growth and development of the entire greater Belen area. Without a flood control plan, however, growth and development will occur sporadically and unbalanced.

We would, therefore, encourage the passage of SB 923 which would secure financial assistance to implement this critically needed plan in the greater Belen area.

VALENCIA COUNTY ECONOMIC DEVELOPMENT CORPORATION
104 N. First Belen, New Mexico 87002 505 / 864-4499

We thank you for your time and consideration and look forward to a positive recommendation to the passage of SB 923.

If we can be of any further assistance, please do not hesitate to contact our office.

Sincerely,

Vangie Gabaldon

Vangie Gabaldon
Executive Director

VG/kt

II

101st CONGRESS
2d Session

S. 2183

To provide for the conservation and development of water and related resources, to authorize the United States Army Corps of Engineers civil works program to construct various projects for improvements to the Nation's infrastructure, and for other purposes.

IN THE SENATE OF THE UNITED STATES

February 27 (legislative day, January 23), 1990

Mr. Moynihan (for himself, Mr. Burdick, Mr. Chafee, and Mr. Symms) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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A BILL

To provide for the conservation and development of water and related resources, to authorize the United States Army Corps of Engineers civil works program to construct various projects for improvements to the Nation's infrastructure, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Section 1. This Act may be cited as the "Water Resources Development Act of 1990".

Sec. 2. For purposes of this Act, the term "Secretary" means the Secretary of the Army.

TITLE I—PROJECT AUTHORIZATIONS

SEC. 101. The following projects for water resources development and conservation and other purposes are authorized to be carried out by the Secretary substantially in accordance with the plans, and subject to the conditions, recommended in the respective reports designated in this section:

(1) Bayou La Batre, Alabama. The project for navigation for Bayou La Batre, Alabama: Report of the Chief of Engineers, dated August 3, 1989, at a total cost of $16,230,000, with an estimated first Federal cost of $4,490,000, and an estimated first non-Federal cost of $11,740,000.

(2) Clifton, San Francisco River, Arizona. The project for flood control, Clifton, San Francisco River, Arizona, authorized by section 401(d) of the Water Resources Development Act of 1986, is modified to authorize the Secretary to construct the project substantially in accordance with the report of the Chief of Engineers, dated September 6, 1988, at a total cost of $12,510,000, with an estimated first Federal cost of $9,150,000, and an estimated first non-Federal cost of $3,360,000.

(3) Nogales Wash and Tributaries, Arizona. The project for flood control, Nogales Wash and Tributar-

ies, Arizona: Report of the Chief of Engineers, dated February 28, 1989, at a total cost of $7,260,000, with an estimated first Federal cost of $5,440,000, and an estimated first non-Federal cost of $1,820,000. The Secretary shall cooperate with the Government of Mexico as necessary to provide for flood warning gauges in Mexico.

(4) Coyote and Berryessa Creeks, California. The project for flood control, Coyote and Berryessa Creeks, California: Report of the Chief of Engineers, dated February 7, 1989, at a total cost of $56,300,000, with an estimated first Federal cost of $39,000,000, and an estimated first non-Federal cost of $17,300,000.

(5) Miami Harbor Channel, Florida. The project for navigation, Miami Harbor Channel, Florida: Report of the Chief of Engineers dated September 25, 1989, at a total cost of $65,700,000, with an estimated first Federal cost of $41,920,000, and an estimated first non-Federal cost of $23,780,000.

(6) Martin County, Florida. The project for storm damage reduction, Martin County, Florida: Report of the Chief of Engineers dated November 20, 1989, at a total first cost of $9,400,000, with an estimated first Federal cost of $3,850,000, and an estimated first non-Federal cost of $5,550,000. In addition, periodic nour-

ishment costs are estimated at $5,220,000, with an estimated Federal cost of $2,140,000, and an estimated non-Federal cost of $3,080,000.

(7) Fort Wayne, St. Mary's and Maumee Rivers, Indiana. The project for flood control, Fort Wayne, St. Mary's and Maumee Rivers, Indiana: Report of the Chief of Engineers, dated May 1, 1989, at a total cost of $16,300,000, with an estimated first Federal cost of $12,100,000, and an estimated first non-Federal cost of $4,200,000.

(8) Boston Harbor, Massachusetts. The project for navigation, Boston Harbor, Massachusetts: Report of the Chief of Engineers, dated May 11, 1989, at a total cost of $17,960,000, with an estimated first Federal cost of $8,250,000, and an estimated first non-Federal cost of $9,710,000.

(9) Ecorse Creek, Wayne County, Michigan. The project for flood control, Ecorse Creek, Wayne County, Michigan: Report of the Chief of Engineers, dated August 8, 1989, at a total cost of $7,280,000, with an estimated first Federal cost of $4,560,000, and an estimated first non-Federal cost of $2,720,000.

(10) Coldwater Creek, Missouri. The project for flood control, Coldwater Creek, Missouri: Report of the Chief of Engineers, dated August 9, 1988, at a total

cost of $22,380,000, with an estimated first Federal cost of $15,500,000, and an estimated first non-Federal cost of $6,880,000.

(11) River Des Peres, Missouri. The project for flood control, River Des Peres, Missouri: Report of the Chief of Engineers, dated May 23, 1989, at a total cost of $20,550,000, with an estimated first Federal cost of $15,270,000, and an estimated first non-Federal cost of $5,280,000.

(12) Passaic River Main Stem, New Jersey and New York. The project for flood control, Passaic River Main Stem, New Jersey and New York: Report of the Chief of Engineers, dated February 3, 1989, at a total cost of $913,500,000, with an estimated first Federal cost of $674,600,000, and an estimated first non-Federal cost of $238,900,000.

(13) Rio De La Plata, Puerto Rico. The project for flood control, Rio De La Plata, Puerto Rico: Report of the Chief Engineers, dated January 3, 1989, at a total cost of $56,990,000, with an estimated first Federal cost of $34,780,000, and an estimated first non-Federal cost of $22,210,000.

(14) Myrtle Beach, South Carolina. The project for storm damage reduction, Myrtle Beach, South Carolina: Report of the Chief of Engineers, dated

March 2, 1989, at a total cost of $59,730,000, with an estimated first Federal cost of $38,820,000, and an estimated first non-Federal cost of $20,910,000. In addition, periodic nourishment costs are estimated at $13,500,000, with an estimated Federal cost of $8,780,000, and an estimated non-Federal cost of $4,720,000.

(15) Mill Creek, Nashville, Tennessee. The project for flood control, Mill Creek, Nashville, Tennessee: Report of the Chief of Engineers, dated April 21, 1986, at a total cost of $14,500,000, with an estimated first Federal cost of $7,250,000 and an estimated first non-Federal cost of $7,250,000.

(16) Buffalo Bayou and Tributaries, Texas. The project for flood control, Buffalo Bayou and Tributaries, Texas: Report of the Chief of Engineers dated February 12, 1990, at a total cost of $544,604,000, with an estimated first Federal cost of $309,313,000, and an estimated first non-Federal cost of $235,291,000.

(17) Ray Roberts Lake, Greenbelt, Texas. The multiple purpose project, Ray Roberts Lake, Greenbelt, Texas, authorized by section 301 of the Rivers and Harbors Act of 1965, is modified to authorize the Secretary to construct recreation features substantially

in accordance with the Report of the Chief of Engineers, dated December 24, 1987, at a total cost of $4,620,000, with an estimated first Federal cost of $1,730,000, and an estimated first non-Federal cost of $2,890,000.

(18) Upper Jordan River, Utah. The project for flood control, Upper Jordan River, Utah: Report of the Chief of Engineers, dated November 16, 1988, at a total cost of $7,900,000, with an estimated first Federal cost of $5,200,000, and an estimated first non-Federal cost of $2,700,000.

TITLE II—PROJECT RELATED PROVISIONS

SEC. 201. (a) The Congress finds that the historic community of Belen, New Mexico, and its population suffer chronic flooding problems that originate in the watershed and mesas west of Belen.

(b) The Congress finds further that a major canal, the Belen Highline Canal, is located immediately adjacent to Belen, New Mexico, and that a serious danger exists to life and property in the event that flood waters breach the canal.

(c) The Congress, therefore, authorizes a project for flood protection for the city of Belen, New Mexico. Such project shall include measures to increase the capacity of the Belen Highline Canal so that it will function as a conveyance system to divert flood waters safely around the city of Belen, as well as irrigation facility.

(d) Subject to the provisions of section 903(c) of the Water Resources Development Act of 1986 (Public Law 99-662), the Secretary is directed to undertake the flood control measures described within subsection (c) of this section in order to protect the city of Belen, New Mexico, and its residents, at a total cost of $19,576,000, with an estimated first Federal cost of $12,130,000, and an estimated first non-Federal cost of $7,446,000 including lands, easements, rights-of-way, and relocations.

SEC. 202. Section 1114 of the Water Resources Development Act of 1986 (100 Stat. 4232–4235) is amended to read as follows:

"SEC. 1114. CROSS FLORIDA BARGE CANAL.

"(a) The barge canal project located between the Gulf of Mexico and the Atlantic Ocean is not authorized for the purposes described in the Act of July 23, 1942 (56 Stat. 703) after the date of enactment of this Act.

"(b) Notwithstanding section 203 of the Federal Property and Administrative Services Act of 1949 and any other provision of law, the Secretary of the Army is directed to transfer all lands and interests in lands acquired by the Secretary and facilities completed for the project described in subsection (a) to the State of Florida without consideration, except as provided in subsection (c) if the State agrees to hold the United States harmless from all claims arising from or through the operations of the lands and facilities conveyed by the United States.

"(c) Actual transfer of the lands and management responsibilities shall not occur on the constructed portions of the barge canal project lying between the Atlantic Ocean and the Eureka Lock and Dam, inclusive, and between the Gulf of Mexico and the Inglis Lock and Dam, inclusive, until 24 months following the date of enactment of this Act.

"(d) In the intervening 24 months following the date of enactment of this Act, the Secretary of the Army shall carry out any and all programmed maintenance on the areas outlined in subsection (c).

"(e) The exact acreage and legal description of the real property to be transferred pursuant to subsection (b) shall be determined by a survey which is satisfactory to the Secretary and the State of Florida. The cost of such survey shall be borne by the State of Florida.

"(f) All lands and interests in land acquired for the barge canal project lying between the Atlantic Ocean and the western boundaries of Sections 20 and 29, Township 15 South, Range 23 East, shall be used by the State of Florida for public parks, conservation or recreational uses only.

"(g) With respect to the remaining lands and interests in land acquired for the barge canal project, lying west of Sections 20 and 29, Township 15 South, Range 23 East, the State shall preserve, enhance, interpret, and manage the water and related land resources of the area containing unique cultural, fish and wildlife, scenic, and recreational values, as determined by the State, for the benefit and enjoyment of present and future generations and the development of outdoor recreation.

"(h) The State of Florida shall pay to the counties of Citrus, Clay, Duval, Levy, Marion, and Putnam a minimum aggregate sum of $32,000,000 in cash or, at the option of the counties, payment to be made by conveyance of surplus lands selected by the State at current appraised values.".

SEC. 203. (a) Subject to the provisions of sections 906(e) and 1135 of the Water Resources Development Act of 1986 (Public Law 99-662) the Secretary, in consultation with the Pyramid Lake Indian Tribe and the Secretary of the Interior, is authorized and directed to develop a plan for a project with a total cost of $25,000,000 to rehabilitate the Lower Truckee River.

(b) The plan of the project authorized in subsection (a) shall include designs to—

(1) restore the riparian habitat and vegetative cover;

(2) stabilize the course of the lower Truckee River and minimize erosion damage;

(3) provide the best possible spawning habitat for the cui-ui fish; and

(4) provide improved spawning habitat for the Lahontan cutthroat trout to the extent deemed feasible.

(c) Subject to the provisions of sections 906(e) and 1135 of the Water Resources Development Act of 1986 (Public Law 99-662), the Secretary, in consultation with the Pyramid Lake Indian Tribe and the Secretary of the Interior, is authorized to develop a plan for facilities with a total cost of $20,000,000 to enable the efficient passage of cui-ui and Lahontan cutthroat trout through or around the delta at the mouth of the Lower Truckee River to obtain access to their upstream spawning grounds.

SEC. 204. Section 1149 of the Water Resources Development Act of 1986 (Public Law 99-662) is amended by adding the following sentence at the end of the section: "On or before June 1, 1991, the Chief of Engineers and the Secretary shall make a recommendation to Congress on the method of payment to be employed for cost sharing purposes, and the identification of eligible project sponsors pursuant to section 101 of this Act.".

SEC. 205. The Secretary of the Army shall not proceed with the divestiture of locks and dams numbered 5 through

14 of the Kentucky River, Kentucky, pursuant to section 301(a) of the Water Development Act of 1986 (Public Law 99-662) until he has complied with the terms of the Memorandum of Understanding between the United States Army Corps of Engineers and the Commonwealth of Kentucky, as approved by the Louisville District Engineer on February 22, 1985, at a total cost of $3,500,000.

SEC. 206. (a) The Assistant Secretary of the Army for Civil Works and the Administrator of the Environmental Protection Agency, and the Governor of the State of New York, acting jointly, shall convene a management conference for the restoration, conservation, and management of Onondaga Lake. The purpose of the management conference shall include but not be limited to—

(1) developing, within the 180-day period following the date of the enactment of this Act, a comprehensive restoration, conservation, and management plan that recommends priority corrective actions and compliance schedules for the cleanup of Onondaga Lake; and

(2) coordinating implementation of the plan by the State of New York, the Army Corps of Engineers, the Environmental Protection Agency and all local agencies, governments, and other groups participating in the conference.

(b)(1) The members of the management conference shall include, at a minimum, the Assistant Secretary of the Army for Civil Works, the Administrator of the Environmental Protection Agency, the Governor of the State of New York, and a representative of—

(A) the Attorney General of the State of New York;

(B) Onondaga County, New York;

(C) The City of Syracuse, New York;

(2) The members of the management conference may designate a permanent representative to attend meetings of the management conference and otherwise represent and vote on their behalf on the management conference.

(3) The management conference shall include the following ex officio members:

(A) the United States Senators from the State of New York; and

(B) the member(s) of the United States House of Representatives within whose congressional district(s) lies Onondaga Lake.

(4) There shall be two standing committees of the management conference:

(A) the Citizens Advisory Committee; and

(B) the Technical Review Committee.

(c)(1) Not later than 120 days after the completion of a plan and after providing for public review and comment, the Assistant Secretary of the Army for Civil Works and the Administrator shall approve such plan if the plan meets the requirements of this section, and the Governor of the State of New York concurs in such approval.

(2) Upon approval of the plan under this section, such plan shall be implemented.

(d)(1) The management conference, with the approval of the Assistant Secretary of the Army for Civil Works, the Administrator of the Environmental Protection Agency, and the Governor of the State of New York, is authorized to make grants to the State of New York and public or nonprofit private agencies, institutions, organizations, and individuals.

(2) Grants under this subsection may be made for—

(A) research, surveys, and studies necessary for the development of the plan under this section, except that grants to any person under this paragraph shall not exceed 70 percent of the costs of such work and that the non-Federal share of such costs are provided from non-Federal sources;

(B) conducting activities identified in the plan developed pursuant to this section, except that grants to any person under this paragraph year shall not exceed

70 percent of the costs of such work and that the non-Federal share of such costs are provided from non-Federal sources; and

(C) gathering data and retaining expert consultants in support of litigation undertaken by the State of New York to compel clean up or obtain clean up and damage cost from parties responsible for the pollution of Onondaga Lake.

(3) In-kind payments shall qualify for the purpose of meeting the non-Federal matching requirements of this subsection.

(e) There are authorized to be appropriated to the Assistant Secretary of the Army for Civil Works and the Administrator of the Environmental Protection Agency such sums as may be necessary to carry out this section.

SEC. 207. (a) The Secretary, in conjunction with the Administrator of the Environmental Protection Agency, is authorized and directed to conduct a reconnaissance study for the purpose of providing plans for the design and construction of a wastewater treatment project in Cranston, Rhode Island. The scope of such study shall include, but is not limited to, a review of the wastewater treatment needs of the City of Cranston focusing on the prevention of groundwater contamination and an investigation of innovative and alternative technology to demonstrate the feasibility of transporting leachate from a sanitary landfill and wastewater from a new waste-to-energy solid waste facility to the City's existing sewage treatment plant.

(b) There are authorized to be appropriated to the Secretary such sums as necessary to carry out this section.

TITLE III—GENERAL PROVISIONS

SEC. 301. The "Federal interest" in water resource development projects of the civil works program of the Army Corps of Engineers shall be determined only through the application of:

(1) benefit/cost analysis; and

(2) an Environmental Impact Statement or Assessment, whichever is appropriate.

SEC. 302. (a) Any changes in eligibility criteria for a water resource development project of the civil works program of the Army Corps of Engineers proposed in rule or regulation shall be submitted, for informational purposes, to the Committee on Environment and Public Works of the Senate and the Committee on Public Works and Transportation of the House of Representatives at least one year prior to its issuance.

(b) Any change in eligibility criteria for a water resource development project of the civil works program of the Army Corps of Engineers proposed by the Secretary in rule or regulation shall not be considered in the evaluation of any water resource development project, or separable element thereof, for which the reconnaissance study has been initiated prior to the issuance of such rule or regulation.

SEC. 303. Not later than December 31, 1991, and every two years thereafter, the Secretary is directed to provide the Congress with a management report on the conduct of the civil works program in each of the Corps of Engineers Districts and Divisions.

SEC. 304. Section 105(b) of the Water Resources Development Act of 1986 (Public Law 99-662) is amended by adding at the end thereof the following: "This subsection shall not apply to planning and engineering of projects for which the non-Federal interests contributed fifty percent of the cost of the feasibility study.".

SEC. 305. Section 402 of the Water Resources Development Act of 1986 (Public Law 99-662) is amended by adding at the end thereof the following sentence at the end of the section: "The recommended level of protection for a Corps of Engineers flood control project shall be that level of protection which maximizes national economic development benefits or the 100-year level of protection if the benefits of providing the 100-year level of protection exceeds its cost, whichever provides the greater level of protection.".

SEC. 306. Section 101 of the Water Resources Development Act of 1986 (Public Law 99-662) is amended by adding at the end thereof the following new subsection:

"(f) MILITARY BENEFITS.—The Secretary shall reduce proportionally the percentage share of navigation project costs required of the non-Federal sponsor of such project equivalent to the percentage of direct benefits of the navigation improvements which are credited to agencies of the Armed Forces of the United States.".

SEC. 307. Section 33 of the Water Resources Development Act of 1988 is amended by inserting "acquisition of real property and associated improvements (from willing sellers), and monetary compensation to affected landowners" after "including maintenance and rehabilitation of existing structures,".

SEC. 308. (a) In developing water control plans which propose to change the operation of Federal water projects from the operations established in the existing water control manuals in accordance with existing congressional project authorizations, the Secretary shall—

(1) solicit comments from the appropriate Federal, State, local, and regional agencies in States affected by such change, and from interested persons who are or could be impacted by project regulation. Copies of such comments shall be made a part of the comprehensive

statement required by subsection (b), shall be made available to the public as provided by section 552 of title 5, United States Code, and shall accompany the proposal through the existing agency review process; and

(2) prepare a comprehensive statement prior to implementation of the plan which sets forth—

(A) the Corps' authority to make such a change pursuant to the project's congressional authorization;

(B) all reasonable alternatives to the proposed change;

(C) any changes in the originally authorized project purposes caused by the proposed change, or any of the alternatives available to accomplish the intended result; and

(D) the costs and direct benefits of the proposed change in comparison to the cost-benefit analysis upon which Congress authorized the project, and the effect of the proposed change on the project repayment schedule, including an identification of the source of revenue for any new repayment schedule.

(b)(1) Upon completion of the comprehensive statement, the Secretary shall issue a finding.

(2) If the Secretary finds that the proposed change will—

(A) significantly affect the originally authorized purposes of the project;

(B) alter the initial cost-benefit ratio upon which the project was authorized so as to alter the feasibility of the project; or

(C) alter the repayment of project costs such that the United States Treasury's ability to recover the costs of building, operating, and maintaining the project are impeded or threatened,

the Secretary shall submit his comprehensive statement to the Congress, together with recommended legislation for a change in the authorized purposes of the project.

(3) If the Secretary finds that the proposed change—

(A) is in accordance with the project's congressional authorization;

(B) is in the public interest;

(C) will result in greater direct economic benefits to the public;

(D) provides an equal to or better cost-benefit ratio than was submitted when the project was authorized; and

(E) will enable the United States' Treasury to recover the costs of building, operating, and maintaining the project in the same timeframe as initially authorized,

the Secretary shall send the comprehensive statement to the Congress and implement the proposed change.

(c) The Secretary shall review existing water control plans, administrative regulations, and current policies and procedures for the purpose of determining whether there are any deficiencies or inconsistencies therein which prohibit full compliance with the purposes and provisions of this Act, and shall propose to the President, not later than one year after the date of enactment of this Act, such measures as may be necessary to bring its authority and policies into conformity with the intent, purposes, and procedures set forth in this Act.

(d) Nothing in this Act shall permit the Secretary to make changes in project operations which extend beyond each project's specific congressional authorization.

(e) Nothing in this Act forbids any person to bring suit under any other statute challenging a change in project operations.

SEC. 309. (a) The Secretary of the Army is authorized to develop a pilot program to design and construct a high-speed magnetic levitation system to be integrated with the interstate highway rights-of-way and other appropriate rights-of-way.

(b) To carry out subsection (a), the Secretary of the Army is authorized to expend funds appropriated by Public Law 101-101 for such purpose and any funds made available to the Army by any law enacted after the date of enactment of such public law for such purpose.

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WATER RESOURCES DEVELOPMENT ACT OF 1990

THURSDAY, APRIL 19, 1990

U.S. Senate
Committee on Environment and Public Works,
Subcommittee on Water Resources,
Transportation, and Infrastructure,
Washington, DC.

The subcommittee met, pursuant to recess, at 10:01 in room 406, Dirksen Senate Office Building, Hon. Daniel Patrick Moynihan (chairman of the subcommittee) presiding.

Present: Senators Moynihan, Reid, Graham, Breaux, and Durenberger.

OPENING STATEMENT OF HON. DANIEL PATRICK MOYNIHAN, U.S. SENATOR FROM THE STATE OF NEW YORK

Senator **Moynihan**. Good morning to our witnesses and our guests at this second hearing of the Subcommittee on Water Resources, Transportation, and Infrastructure on the Water Resources Development Act of 1990.

We are very pleased to have our good friend and neighbor from Pennsylvania, Senator Heinz, who is here, I believe, for the purpose of introducing Mr. Palmer, who will speak later.

Good morning. Would you like to have Mr. Palmer come up with you?

Senator **Heinz**. Mr. Chairman, I think Mr. Palmer has some other people he would like to bring up, too.

Mr. **Palmer**. Mr. William Hahne from USX Corporation, and Mr. Bill Bowker, representing the Governor of the Commonwealth of Kentucky, Senator.

Senator **Moynihan**. A very good morning to you all. As long as you know that the Ohio River originates in Lake Chataqua in New York State, all will be well.

Mr. **Palmer**. We're certainly well aware of that.

STATEMENT OF HON. JOHN HEINZ, U.S. SENATOR FROM THE STATE OF PENNSYLVANIA

Senator **Heinz**. And so it shall remain.

Mr. Chairman, I want to express my personal appreciation to you and to the members of the Subcommittee on Water Resources, Transportation, and Infrastructure for giving me this opportunity to speak on behalf of the Monongahela River transportation improvements that these gentlemen are here to talk about, and to specifically introduce DINAMO, which stands for the Association for the Development of Inland Navigability in America's Ohio Valley.

After a 10-year hiatus, Mr. Chairman, this subcommittee, under your leadership, developed and enacted the Water Resources Improvement Act of 1986. That legislation authorized critical improvements to our inland river system, including the Gallipolis, Grays Landing, and Point Marion locks and dams which are vital to water transportation in southwestern Pennsylvania, and indeed, to the entire Ohio Valley. Today, construction is ahead of schedule and under cost.

But our job has only just begun. Downriver, locks and dams are in dire need of replacement. When a four-lane Interstate narrows down to a two-lane highway, the result is gridlock. Similarly, modernizing only a part of a major river thruway means bottleneck. So whether it is gridlock or bottleneck, both are potentially unsafe, they add to transportation costs, and they waste the taxpayers' money. When it comes to transportation, half-done is simply not enough. A complete system maximizes the benefits of all its components.

The Army Corps of Engineers has concluded that the dam at No. 2 and the lock and dam at No. 3 on the Monongahela River are at the end of their useful lives. These two dams are expected to fail—and I mean fail—within the next 10 years. The locks at No. 3 are also expected to fail by the turn of the century. If we don't replace the locks, and if we lose even a portion of the lock wall, emergency repairs would cost between $5 million and $15 million and close the chamber to all navigation for up to a year.

This Nation's transportation system is an integrated and mutually dependent web or network of road, rail, and water. Together, they ensure that the United States can get goods to market at competitive cost. We can't afford to let any one of those components fail.

That's why we are here today, seeking a contingent authorization to replace these structures. A contingent authorization would permit us to act promptly. It would prevent the Government from incurring emergency repair costs. Acting promptly will save the Corps money and let it begin the next phase in saving these structures. Acting promptly will save the private sector money, assuring them of a sound future in water transportation.

Senator MOYNIHAN. They are 80 years old.

Senator HEINZ. Precisely. They were built back in the days when people used the word "horsepower" to mean critters with four legs, hauling something. They were built at the turn of the century. It is frankly unbelievable, as well as a testament to the Corps of Engineers, that they have so outlived their design lives.

Mr. Chairman, the predominant commodity being transported through these locks and dams is coal. The largest part is steam coal, used to produce electricity to light homes, to power every kind of industry. The rest is metallurgical coal, used for the manufacture of coke, which is essential to the production of iron, steel, and other metals. And gentlemen, you should hear the Chairman—I have heard him talk about how Andrew Carnegie took a pound of coal at a penny and a pound of iron ore——

Senator **Moynihan**. Two pounds of coal.

Senator **Heinz**. Two pounds of coal, excuse me. My memory from 12 years ago, when you made that statement——

Senator **Moynihan**. Well, it was three pounds of iron ore and one pound of coal.

Senator **Heinz**. Each at a penny, and sold at a profit. I forget what that number was.

Senator **Moynihan**. It was sold for three cents.

Senator **Heinz**. I don't know how you make a profit selling two cents of this and one cent of that, but——

Senator **Moynihan**. That was a detail that never would have occurred to Andrew Carnegie.

Senator **Heinz**. Let me assure you—and I want to give you one example—that that is still going on. The Clairton Coke Works is located near Lock No. 2. It is a major consumer of metallurgical coal. It is, indeed, the principal coking source for steel-making facilities located in Fairfield, Alabama, a very long way away; Lorain, Ohio; Fairless, Pennsylvania, on the other side of the State; Gary, Indiana; and for metalworks up and down the Monongahela Valley. To give you an idea how large it is, all the barges that arrive at Clairton every year would stretch for 16 miles in a line up the river.

Mr. Chairman, I ask unanimous consent to put the rest of my remarks in the record.

I just want to say that few organizations have worked as hard on this issue as DINAMO. They have worked to convince people both in the public sector and the private sector of the benefits—indeed, the necessities—of water transportation. They were instrumental in working with you last time on the 1986 bill that you deserve so much credit for.

And so it is a pleasure to introduce and commend to you Mr. Barry Palmer, who we view as a very great champion of water resources. He will be testifying before you this morning. I am pleased to be here to introduce him.

[The balance of Senator Heinz' statement follows:]

BALANCE OF SENATOR HEINZ' PREPARED STATEMENT

The Clairton Works, located near lock No. 2, is a major consumer of metallurgical coal. It is the principal coking source for iron making facilities located in Fairfield, Alabama; Lorain, Ohio; Fairless, Pennsylvania; Gary, Indiana; and for metal works up and down the Monongahela Valley. It is one of the largest coking facilities in the world. If we lined up end-to-end all the barges that arrive at Clairton every year, the line would stretch for 16 miles.

In order to keep its costs in line and its customers competitive, Clairton Works, like General Motors, has had to incorporate the "just in time" inventory control method. What's on the river now, will be used just as soon as it arrives.

Any interruption along the water transportation system would have dire consequences not just for users like Clairton, but for the railroads that pick up the coal at intermodal facilities, for the power plants that need the coal to fuel their turbines.

Safe, reliable, and inexpensive inland navigation makes our coal, steel and other bulk cargo more competitive. It preserves and creates jobs in our basic industries.

Few organizations have worked as hard as DINAMO in convincing the public and private sectors of the benefits of water transportation. So, Mr. Chairman, I would like to introduce and commend to you Mr. Barry Palmer, a champion of water resources, to your subcommittee who I understand will be testifying later this morning.

Senator MOYNIHAN. Senator Heinz, I know that Senator Reid would want to thank you for doing so, and to say that you have made your case. Anyone who has seen these installations marvels at how well they were put together at the time, given the technology. But they are under the constant strain of the Monongahela River. It is not a stable pressure, but it is constant and dynamic. If they ever go, getting them back in shape will cost billions. Keeping them in shape involves sums that are almost derisory.

I won't bring up the Tennessee-Tombigbee River again, but when we think of what we put into that, with almost zero impact on industrial activities, and what we have here simply to maintain and to retain; I look forward to hearing Mr. Palmer, and I am sure you do too, sir.

Senator HEINZ. Mr. Chairman, Senator Reid, I thank you very, very much.

Senator REID. Mr. Chairman, I wonder if you would consent to my giving a statement out of order.

Senator MOYNIHAN. Fine. Why don't we thank Senator Heinz.

Gentlemen, we will hear from you later.

Senator Reid, would you proceed?

Senator REID. Would that be permissible with you?

Senator MOYNIHAN. Anything you want is permissible.

Senator REID. I thought I had heard a lot of your stories, but I don't know anything about this Tennessee River.

Senator MOYNIHAN. The Tennessee-Tombigbee?

Senator REID. Yes. I'd love to hear that some time.

Senator MOYNIHAN. It was a great idea when Jefferson had it, not such a great idea when we built it two centuries later.

Senator REID. The Tennessee-Tom River?

Senator MOYNIHAN. It goes from the Tennessee River, and picks up the Tombigbee, and makes its way to the Gulf of Mexico. It was a device for getting trade from the Ohio Valley down to the Gulf of Mexico and over to Cuba when the French controlled New Orleans.

But then we got hold of New Orleans, and it didn't seem that important until, two centuries later, we built it anyway. It cost about $2 billion.

Would you please proceed?

OPENING STATEMENT OF HON. HARRY REID, U.S. SENATOR FROM THE STATE OF NEVADA

Senator REID. Thank you very much, Mr. Chairman, for holding these hearings.

I have a particular interest in two projects in this legislation that I believe are of great importance to the State of Nevada.

For the past several years I have been facilitating negotiations between the major water users on the Truckee River system, including the United States, in an attempt to reallocate scarce water supplies and end, in some books, 80 years of litigation and almost 100 years of negotiations between the States of Nevada and California as to allocating the water in the Carson and Truckee Rivers.

An important goal of these negotiations also, Mr. Chairman, has been to improve the possibility of recovery for an endangered species that inhabits Pyramid Lake in the lower Truckee River. The

Cui-ui has been indigenous to Pyramid Lake and the Truckee River for at least 5,000 years. This, Mr. Chairman, is a fish. For the Pyramid Lake Paiutes, preservation of the Cui-ui has come to symbolize their way of life and has sustained the tribe for thousands of years.

The Cui-ui is a lake dweller, but can only reproduce in streams. The preservation of the species is dependent upon the integrity of the entire river and lake system.

Mr. Chairman, the first reclamation project of the Bureau of Reclamation, the Newlands Project, which began in 1902, shut off nearly half the Truckee River flow to Lake Pyramid. Not only did it do that, Mr. Chairman, but another lake that was in existence for thousands of years, Lake Winnemucca, that was caused from the overflow on occasion of Lake Pyramid, was completely terminated. Lake Winnemucca, which as late as the 1920s when the lake started drying up, had over 2 million birds in it, and now it is as dry as the floor out in front of this podium. There is nothing there and never will be.

Mr. Chairman, this first project of the Bureau of Reclamation, diverted water from the Truckee River for agricultural purposes, and Pyramid Lake dropped 70 feet in elevation. The Cui-ui all but disappeared. These fish were the very first species listed as endangered under the Endangered Species Act. Serious efforts have been underway in recent years to save this fish.

Allocating water for the benefit of the fish is a vital part of our proposed Truckee River water settlement. However, we cannot recover the species by allocating water alone. The projects authorized by this legislation are vital towards enabling the Cui-ui to successfully spawn.

Mr. Chairman, today Joe Ely, Chairman of the Pyramid Lake Paiute Tribe, is here to provide detailed testimony about the importance of the Corps efforts to recover the Cui-ui. I want to extend the committee's welcome to Mr. Ely and a sincere welcome in many other ways for his willingness to appear before the committee, and most of all, for his diligence to address this serious problem that has been facing Nevada for over eight decades.

During the March 1 hearing, Mr. Chairman, you noted the attractiveness of the Lower Truckee River Project and stated that the project gives the Corps an opportunity to rectify an action that took place at the beginning of this century. I couldn't agree more. It also gives us an opportunity to help facilitate an agreement, as I've indicated, to end over 80 years of water wars on this very, very small and tiny desert river.

Mr. Chairman, I am not going to be able to remain. Mr. Ely appears in the second panel, and I will try to get back.

Senator MOYNIHAN. We know, sir, that you would have to be away.

Could I ask, would Mr. Ely stand up?

Mr. Ely, the committee welcomes you and we look forward to hearing from you.

Senator REID. I will attempt to make it back. I don't know that I can. If not, I would ask that these questions together with the replies appear in the record, because they are very important to the Corps' ability to fulfill its obligations under this act that has been promulgated here. (See p. 253.)

Thank you, Mr. Chairman.

Senator MOYNIHAN. Could I just repeat what was said last time? This seems to me to be a matter of priority for this committee. This is undoing a mistake we made 80 years ago. The idea of a lake out in that part of the world dropping 75 feet gives you a dimension.

Is the Cui-ui a salmon-type fish that goes upstream to spawn?

Senator REID. It is similar. It's not of the same species. I've learned a little bit about the Cui-ui. Even though it is a lake fish, it can only spawn in the streams. We have tried other ways, fish ladders, for example, and nothing has worked to this point.

Mr. Chairman, I hope someday you can see that beautiful lake. It is really a wonder of nature. It is in the middle of a very arid desert. In fact, as you come into my office I have a great picture that takes up most of my reception area of Pyramid Lake. In fact, I don't think Mr. Ely has seen my picture of Pyramid Lake. We'll have to make sure that he gets to the office today to see my great picture of Pyramid Lake, to which he has devoted hundreds of hours in trying to preserve it.

Senator MOYNIHAN. More is the reason to get on with this bill and get it to the floor and into legislation.

Senator, we thank you very much, sir. If you can come back, we will welcome you, of course, and if you can't, we will ask the questions for you.

Senator REID. Thank you for your patience.

Senator MOYNIHAN. Very well, then.

We have a very busy morning. We are in session, so we will proceed.

Our first panel is a general panel on waterways and their general circumstance. Would the members come forward: Mr. Harry Cook, President, National Waterways Conference; Mr. Richard Lawson, President of the National Coal Association; Mr. James Coyne, Executive Director of the Interstate Conference on Water Policy; and Mr. Daniel Sagramoso, Chief Engineer and General Manager of the National Association of Flood and Stormwater Management Agencies.

As is our practice, we will begin as the roster is set forth. So, Mr. Cook, we welcome you, sir.

All statements will be put in the record. We would like the members of the panel to keep themselves to five minutes in summarizing so that we can hear an exchange back and forth.

Mr. Cook, good morning, sir.

STATEMENT OF HARRY N. COOK, PRESIDENT, NATIONAL WATERWAYS CONFERENCE, INC.

Mr. COOK. Good morning, sir. Thank you very much.

We welcome this opportunity, Mr. Chairman, to present our views on the Water Resources Development Act of 1990. First and foremost, we applaud your efforts to enact authorization legislation on a biennial basis. A two-year cycle for water project authorizations is imperative if the water resources infrastructure is to keep pace with water resources needs.

In submitting its draft bill, the Administration contended that authorization legislation should include only projects which have fully completed the Administration's planning and policy review process. However, because authorization legislation is considered no more often than once every two years, and since there is still a backlog of worthy projects from the pre-1986 period, we believe the committee should give serious consideration to conditional authorizations, contingent upon subsequent Administration approval.

Such a procedure is needed in the case of lock and dam replacements which are in danger of failure or which may require attention in the near term. It is not in the public interest for the authorization process to be used as a rationing device to achieve budgetary or other policy objectives not related to a project's economic or environmental considerations.

Last August the Army Corps of Engineers issued a regulation limiting Federal participation in civil works projects which are deemed to benefit a single entity or a single owner. In the case of navigation improvements, the policy bars Federal participation in a channel serving a private terminal. At a time when the Federal Government is actively supporting the privatization of transportation services, we believe that a privately-owned facility is in the Federal interest if it serves a variety of shippers, in the case of a terminal, who share in the transportation cost savings afforded by the Federal channel.

The multiple-beneficiary category of navigation and flood control projects, too, provides a sufficient test of the Federal interest in water resources projects. In recent years the Chattahoochee and Coosa Rivers in the southeast and the Missouri River have experienced serious water shortages. There has not been enough water in these river systems to satisfy all of the water demands. As a result, certain changes in the operation of Federal water projects have been proposed.

In the development of water control plans, we are concerned that navigation not be slighted. In most instances, it was the inclusion of navigation benefits which made these river developments economically feasible for multiple public purposes. Navigation remains today a prime objective and in the Federal interest, if you will, in these water-short river valleys.

The Water Resources Development Act of 1986 established a new non-Federal financial partnership for funding water resources development. The non-Federal role is strictly enforced. The Federal Government, in turn, must live up to its end of the 1986 cost-sharing agreement. We are concerned, for instance, that the proposed three-fold increase in the ad valorem tax on deep draft waterborne commerce would completely defederalize harbor maintenance, so that it would no longer be a cost-shared program. If the cost of this program can be shifted entirely to non-Federal interests, we worry that such a fate is also in store for other water resources interests.

In passing the landmark 1986 act, Congress failed to give adequate consideration to the implementation of cost-sharing requirements for navigation projects on the Great Lakes, where projects are located in one State but whose primary beneficiaries are often in other States, far removed. It is almost impossible, therefore, to find a local sponsor for Great Lakes projects, like a supplementary lock at Sault Ste. Marie, Michigan. This is a problem requiring Congressional remedy.

The Federal Government has a vital stake in navigation, flood control, and other water resources programs. They contribute to American export expansion, national security, agricultural and industrial productivity, and overall national economic development. Water projects constitute a significant yet often overlooked portion of our beleaguered infrastructure.

We appreciate your attention, Mr. Chairman, and that of your subcommittee in addressing the Nation's water resources needs, and we wish you much success in enacting a responsive, realistic Water Resources Development Act of 1990.

Thank you very much.

Senator MOYNIHAN. Thank you. My goodness, right on time.

Let me get back to your question of finding single sponsors in large complexes like the Great Lakes. We'd like to hear more from you.

And now, Mr. Lawson.

STATEMENT OF JOSEPH E. LEMA, VICE PRESIDENT FOR TRANSPORTATION, NATIONAL COAL ASSOCIATION

Mr. LEMA. Good morning, Mr. Chairman. My name is Joseph E. Lema. I am Vice President for Transportation——

Senator MOYNIHAN. Yes, Mr. Lema. I've got to say it says Lema in front of you and Lawson in front of me, and I think there's some confusion here.

Mr. LEMA. Mr. Chairman, Richard Lawson, the National Coal Association's President, is my boss. He did ask me to appear on his behalf today. I am the Vice President for Transportation of the National Coal Association.

Senator MOYNIHAN. Well, you're probably the man we want to hear from anyway, aren't you?

We welcome you, Mr. Lema. Forgive me.

Mr. LEMA. Thank you, Mr. Chairman.

Mr. Chairman, our member companies account for approximately 75 percent of the coal produced in the United States. NCA warmly appreciates this opportunity to appear with regard to S. 2183, the Water Resources Development Act of 1990.

Inasmuch as the coal industry relies on efficient, competitive transportation on the inland waterways system to secure effective access to domestic and international markets, NCA respectfully requests the subcommittee to consider incorporating certain specific navigation improvement projects in construction authorizations presented in title 1 of S. 2183. These projects are the McAlpine Locks and Dam on the Ohio River in Indiana and Kentucky, the Marmet Locks and Dam on the Kanawha River in West Virginia, and Locks and Dams 2, 3, and 4 on the Monongahela River in Pennsylvania.

Senator MOYNIHAN. Could I just interrupt to say that we've already heard about 2, 3, and 4 from Senator Heinz. He was talking about them.

Mr. LEMA. You certainly have, Mr. Chairman, and we certainly endorse heartily his observations about the problem there.

The Corps has determined that the McAlpine Locks and Dam, unless improved in capacity, will be a serious constraint to commercial barge traffic in the 1990s. The existing auxiliary lock chamber at McAlpine should be replaced by a 110-foot by 1,200-foot lock in order to accommodate tows consisting of a towboat and 15 modern barges, a configuration of equipment in common use today on the main stem of the Ohio River. In 1988 dollars, the Corps estimates the cost to be $200 million.

The Marmet facility also requires additional capacity, which is possible by replacing its auxiliary lock chamber with a 110-foot by 800-foot lock, a modification that is especially timely inasmuch as the nearby Winfield Locks and Dam on the Kanawha River have similar construction underway, pursuant to the authorization by the Water Resources Development Act of 1986. The Corps estimates the cost, in 1988 dollars, at $150 million.

The Monongahela River facilities, which have been referred to by Senator Heinz before, I would underscore are seriously deteriorated, both due to the high utilization of the locks and the fact that by the year 2000, by the turn of the century, those structures will be 93 years old. Their age has taken its toll on their structural integrity, a fact that I became particularly aware of in the mid-1980s when an NCA member company representative brought to Washington a piece of concrete which had fallen off one of the locks into a barge during a lockage maneuver.

Locks 2, 3, and 4 are obsolete and should be replaced with higher capacity facilities, matching the new structures at Locks and Dams 7 and 8 on the Monongahela which are under construction, also pursuant to authorization in the 1986 bill. In 1988 dollars, the Corps estimates that construction at these locations would total $395 million.

This type of construction, Mr. Chairman, often takes four to eight years for completion. Therefore, it is desirable and appropriate to authorize these projects in the 1990 Water Resources Development Act so they will be built in a timely, orderly fashion during this decade.

River congestion is costly, causing losses in water carrier productivity, with commensurate increases in electric rates and in consumer prices of items produced by energy-intensive industries in the U.S. In addition, such inefficiencies reduce the competitiveness of U.S. coal and other commodities and goods produced in our country and exported to world markets, utilizing the waterways system to reach deep draft ports on the Gulf Coast of the U.S.

In conclusion, Mr. Chairman, the projects for which we respectfully request construction authorizations in S. 2183, added to the projects previously authorized in 1986 and 1988, represent timely, justified steps which, from a systems management perspective, will preserve the commercial utility of the inland waterways.

That goal is reinforced today by other important qualities associated with river transportation—namely, energy conservation, attributable to the fuel efficiency of barge movements, and environmental benefits due to the ability of barge operations to traverse communities without disrupting other surface traffic movements.

That triad of benefits, Mr. Chairman—transportation productivity, energy conservation, and freedom from adverse impacts on the environment in communities located in transportation corridors—

makes the requested construction projects exceptionally attractive, we believe.

Thank you for allowing me to appear. I would be glad to answer your questions.

Senator MOYNIHAN. Thank you. That's a very persuasive set of propositions. Be it noted that we are talking about maintaining systems that are a century old. It's not much to ask.

Could I ask you at this point, what is the state of coal exports from the United States?

Mr. LEMA. Mr. Chairman, we were pleased to note that in 1989, last year, we were moving back toward the level of exports that we enjoyed in 1981. You might remember that there was a spurt in the early 1980s of coal exports, reaching a little over 100 million tons—up to as much as 110 million tons—a year. We dropped off in the mid-1980s for a variety of reasons, down to the 70 million to 80 million ton range. Last year we exported nearly 100 million tons. We expect to continue exporting 100 million tons in 1990.

Senator MOYNIHAN. Where does it mostly go?

Mr. LEMA. Traditionally—of course, there are two types of coal exports, metallurgical coal as well as steam coal. The markets in Canada and the Far East, notably the Japanese market, as well as the European market in France and other countries are steel companies, and that represents about two-thirds of our coal exports.

Senator MOYNIHAN. And that goes through the Canal to the Japanese?

Mr. LEMA. It may. Some, in fact, has come off the West Coast as well, so it has the ability——

Senator MOYNIHAN. Does it get there by train?

Mr. LEMA. It's a very long ride, but it does, sir, yes. It goes through the mountains, in fact. However, we do have the ability to export from modern coal terminals that U.S. coal producers have built in the 1980s in Baltimore, Maryland; Hampton Roads, Virginia; Charleston, South Carolina; Mobile, Alabama; New Orleans; as well as on the Pacific Coast, at Los Angeles-Long Beach.

Senator MOYNIHAN. Does the subject of getting to a 60-foot harbor come up with you, the supercolliers?

Mr. LEMA. It certainly does, Mr. Chairman. In fact, that was one of the attractions to us in the 1986 Act—that, the dredging to deeper harbor channels, as well as the improvement of the inland waterways.

The point, simply, is this: U.S. coal traditionally was exported in Panama-size vessels, 60,000-ton vessels and somewhat smaller. Now we are able, thanks to the deepening of the harbor at Hampton Roads, which is now down to 50 feet——

Senator MOYNIHAN. Is Hampton Roads down to 50 feet?

Mr. LEMA. It has been constructed. It was constructed way ahead of schedule and way under cost, due to that 1986 act. Now they are exporting coal in vessels that can accommodate 110,000——

Senator MOYNIHAN. The new colliers that the Europeans have built?

Mr. LEMA. That's correct, and they propose to go to 55 feet, which would get us to 150,000 deadweight ton size, and we applaud that.

The cost of ocean freight is much less and we become more competitive with other coal-exporting countries.

Senator **Moynihan**. As you know, and just for the record, the South Africans and the Australians have produced ports that can handle these colliers, and in the end that transportation efficiency is going to determine where the coal gets mined.

Mr. **Lema**. Sir, that is absolutely correct, and where the coal industry has increased our coal mining productivity in the last decade by 75 percent, the extent to which we can improve our inland transportation productivity—and the railroads and barge lines have—and our deep draft port capacity, will make us more competitive with South Africa, with Australia, with Colombia in South America, and other coal-exporting countries, and we value that.

Senator **Moynihan**. If they are elementally combined, you can have the most efficient productivity in the minehead possible, but if you can't get it out of the country, it doesn't help much.

Senator Graham, good morning. Would you like to make an opening statement, sir?

Senator **Graham**. Mr. Chairman, thank you, and thank you for holding this hearing this morning. I do have an opening statement which I will submit for the record.

[Senator Graham's statement follows:]

Opening Statement of Hon. Bob Graham, U.S. Senator From the State of Florida

It is my pleasure to welcome to the subcommittee this morning two witnesses from Tampa, Florida. Mr. Emmett Lee is the director of the Port of Tampa, and Mr. Steven Markey is the director of supply and distribution for Gardinier, Inc., which is a subsidiary of Cargill, Inc.

Mr. Lee and Mr. Markey will discuss their concerns regarding the Corps of Engineers' "Single Beneficiary Policy" and its impact on two navigation projects at the Port of Tampa.

The single beneficiary policy limits Federal participation in proposed harbor projects to those which benefit more than one terminal owner along a navigation channel. The rule does not take into account transportation cost savings or the number of shippers which would benefit from proposed improvements. I am concerned that the Corps' traditional cost/benefit analysis procedures, which have been the successful basis for determining Federal particpation for many years, are undermined in some instances by the steadfast single beneficiary limitation.

I am curious about what legislative direction has guided this policy and what opportunity for public review and comment has been afforded in its development. I hope my colleagues on this subcommittee will review this policy carefully in light of its impact at the Tampa Port and its potential effects at other navigation projects across the country.

I am pleased to introduce Mr. Lee and Mr. Markey to address this issue.

Senator **Moynihan**. We are in our first panel, and we are now turning to Mr. James Coyne, who is Executive Director of the Interstate Conference on Water Policy.

Mr. Coyne, welcome back.

STATEMENT OF JAMES K. COYNE, EXECUTIVE DIRECTOR, INTERSTATE CONFERENCE ON WATER POLICY

Mr. **Coyne**. Mr. Chairman, it is very nice to be with you today. As you may recall, I was a Member of the U.S. Congress from Bucks County in Pennsylvania and became quite concerned with the interest of rivers, as the Delaware River went by my district. I guess like many great rivers, it, too, begins in New York State.

Senator MOYNIHAN. It begins about five miles from where we live.

Mr. COYNE. Well, take good care of it. We get what you pass on to it. Thank you very much.

Senator MOYNIHAN. It's a great trout river.

Mr. COYNE. The Interstate Conference on Water Policy enthusiastically supported the passage of the 1986 act and has worked closely with the Corps of Engineers as we jointly struggle with the challenges of this new partnership. As the independent national association of State, interstate, and regional water administrators, ICWP is committed to making the water resource policy reforms of the 1986 act work. The experience of ICWP's members with implementing the new law over the past three years suggests that a few adjustments are necessary to enhance the reforms originally envisioned by the Congress and by yourself, while preserving the framework of the partnership.

In my testimony I deal with three specific issues of feasibility study cost-sharing, planning or reconnaissance study cost-sharing, and planning and engineering study cost-sharing, which I would very much like to commit to you for your review. I would especially like to address the issue of single-owner policy as it affects States——

Senator MOYNIHAN. Is that what Mr. Cook was talking about?

Mr. COYNE. Absolutely.

Senator MOYNIHAN. All right. You're both on the same subject.

Mr. COYNE. Absolutely.

Now, we have a slightly different perspective on it. I think we agree, but we are, of course, representing State and municipal governments and many nonprofit entities who have been affected negatively by this policy. Of course, I think Mr. Cook also represents many commercial interests, which also have the same difficulties with it.

In 1936, Congress established a nationwide policy of flood control on navigable waters and tributaries and determined that it was in the interests of the general public for the Federal Government, through the Corps of Engineers, to participate in flood control activities on these waters. The Flood Control Act of 1936 states that there is a Federal interest in improvements "for flood control purposes if the benefits to whomsoever they may accrue are in excess of estimated costs, and if the lives and social security of people are otherwise adversely affected."

The Water Resources Development Act of 1986 did not change the Federal interest, but did redefine cost-sharing of flood control and other water resource projects. This new cost-sharing significantly increased the non-Federal costs, and States and local governments were to become partners in the water resource development process from the initiation of planning through to the completion of construction.

The Corps of Engineers has recently promulgated a regulation which significantly changes the balance of Federal versus non-Federal interest in flood control and other projects. These changes modify where there is, in the view of the Corps of Engineers, a Federal interest in proposed water resource projects. This revised regulation would prohibit the Corps of Engineers from participating in flood control projects where there is a single owner who benefits, such as a public wastewater treatment plant, or public and private schools, or public and private colleges, or public highways. This interpretation of where there is a Federal interest in flood control and other water resource projects is not at all consistent with our understanding of the Water Resources Development Act of 1986 or the historical role of the Corps of Engineers in water resource projects.

This new interpretation of Federal interest is also inconsistent with the Disaster Relief and Emergency Assistance Amendments of 1988. In the case of a Federal disaster declaration, Federal assistance is available for emergency protective measures to save lives, to protect public health and safety, to protect improved property, and to restore eligible facilities after a disaster. "Eligible facilities" include public facilities owned by a single owner, such as a State or local government, including public power, sewage treatment and collection, water supply and distribution, airports, non-federally subsidized State roads and highways, other public buildings and structures. Eligibility also extends to certain private nonprofit facilities, including educational, utility, emergency medical or custodial care facilities, and so forth.

We have one Federal agency here, the Corps of Engineers, providing new interpretations of when there is a Federal interest in protection of publicly-owned property at the same time that another agency, FEMA, is issuing rules which say that there is a Federal interest in protecting the exact same types of facilities which the Corps of Engineers now excludes.

ICWP believes that property ownership should not be a test of whether a Federal interest exists in the protection of that property against flood and erosion damages. Publicly-owned properties, such as public power, sewage treatment and collection, water supply and distribution facilities, airports, roads and highways, and other public structures or systems should be eligible for protection irrespective of the number of entities involved in the ownership.

We offer two optional proposed amendments to the——

Senator MOYNIHAN. Where are they in your statement?

Mr. COYNE. They are on page 6 of our testimony.

Senator MOYNIHAN. On page 6. All right. Option 1 and Option 2, okay.

Mr. COYNE. I won't read through these, but suffice it to say that they are slightly different treatments of the problem which allow it to be achieved through amending different pieces of original legislation in the code.

I would also like to address the issue of cost-sharing for section 22 on flood plain management services.

The Administration in its fiscal year 1991 budget has again proposed cost-sharing of planning assistance to States in flood plain management services. Beginning in fiscal year 1991 these services, which have traditionally been provided at 100 percent Federal cost, will require non-Federal matches on a graduated scale beginning at 10 percent and increasing to 50 percent by 1993.

We are concerned about this proposal for a variety of reasons. Throughout its history these section 22 planning assistance programs have yielded a wide variety of products that have been invaluable in supplementing the water resource management capabilities of the States. Congress recognized the value of this assistance program when the authorized funding level of the program was raised from $4 million to $6 million in the 1986 act. The cost-sharing reforms of the act were not applied to section 22, and we believe that was done for a good reason. Cost-sharing requires significant advance cooperative planning and scheduling of State fiscal resources. Requiring cost-sharing, however, for section 22 studies may thus eliminate the flexibility that is fundamental to this program. In the past, section 22 authority has been used to respond to various emergency situations and special needs. These efforts can be, and often are, of a collaborative nature. However, cash match funding is simply inappropriate for these programs.

In 1989, ICWP conducted a survey to assess the States' use of Federal funds for these studies and flood plain management services. We have attached the results of that survey in our report. The survey queried the States, and over half the States responded. Of the seven responding States that reported that they cost-share section 22 studies, all seven reported that they make up part of their contribution with in-kind services. Only one State indicated that it provides a cash match. All 26 of the responding States were opposed to the proposed non-Federal cost sharing for both section 22 studies and flood plain management services.

Furthermore, results of this survey indicate that only one-quarter of the States would have the proposed non-Federal share available in their fiscal year 1991 budgets if cost-sharing were enacted for these programs.

The ICWP survey also showed that most States utilize section 22 funding for assistance for reconnaissance level-type studies.

Again, I thank you very, very much for the opportunity to address the committee, and I hope that you can address these important issues.

Senator **Moynihan**. Mr. Coyne, as a former Member, you are extraordinarily welcome. I thank you for bringing option language here. We obviously have to think about this.

Dr. Dickey, I see you back there. We're going to want to hear the Corps' view of this issue. Let's talk it out as we get around to markup. It is a very plain point, which is that the fact of single proprietorship does not denote a narrow interest.

Mr. **Coyne**. Absolutely. The intent of Congress was to prevent a single entity which is really a narrow interest, not a single entity which has a broad public interest.

Senator **Moynihan**. I can remember two years back, that's what we did.

All right, we have to attend to that. Dr. Dickey, you are taking notes?

Senator Breaux, we welcome you, if you would like to make an opening statement, sir?

Senator **Breaux**. No, listen and learn.

Senator **Moynihan**. Well, we are learning a good deal.

So we will turn now to Mr. Sagramoso, who is the Chief Engineer and General Manager of the National Association of Flood and Stormwater Management Agencies. I dare not think what the acronym is for that.

STATEMENT OF DANIEL E. SAGRAMOSO, CHIEF ENGINEER AND GENERAL MANAGER, NATIONAL ASSOCIATION OF FLOOD AND STORMWATER MANAGEMENT AGENCIES

Mr. **Sagramoso**. It's NAFSMA, Mr. Chairman.

NAFSMA represents State and local public agencies nationwide with service population areas ranging from 76,000 to more than 10 million. Our members are current and potential local sponsors of Corps of Engineers water resources projects. I would like to commend the committee again for its efforts to keep the Water Resources Development Act in the two-year authorization cycle.

Senator **Moynihan**. For those in the audience who aren't aware of it, we went 16 years without a water bill. That's not to the credit of this committee nor to the advantage of the industries and the people involved.

Mr. **Sagramoso**. I would also like to underscore the commitment of NAFSMA and its members to the basic tenets of the act, partnership and cost-sharing. To demonstrate our commitment, NAFSMA jointly sponsored with the Army Corps of Engineers a workshop in Arizona last December, the purpose of which was to identify key areas where the partnership needs refining. I am pleased to provide the subcommittee with a copy of the workshop report.

While we are making progress, the system is still in definite need of fine-tuning. Although some of that refining can be accomplished by changes in internal Corps policy, other issues will require legislative direction.

Let me comment briefly on some of the major proposed legislative provisions that are now before you, and also ask that some additional proposals or issues be considered.

Within S. 2183, NAFSMA supports sections 302, 303, 304, and the goal of section 305——

Senator **Moynihan**. Don't skip over that part of your testimony where you say that a new partnership between the Corps of Engineers and local sponsors is moving forward, and that cost-sharing is now accepted as an operating principle, and that there is a new sense of cooperation and joint problem-solving. That's good to hear.

Mr. **Sagramoso**. Good. I'd be pleased to say that. I think that's definitely so. We have made great strides in that area.

We are concerned in section 305, however, that the present language could be interpreted as a minimum requirement, and possibly lead to denials of Federal assistance for projects of 100-year level of protection or less. NAFSMA recommends that if this section is approved, language be included stating that "while the 100-year level of protection is a desirable objective, Federal assistance should not be denied the projects where that level of protection is not achievable."

NAFSMA also asks that the following proposals or issues be considered.

During discussions at the Corps/NAFSMA Arizona meeting, it became clear that earlier signing of the Local Cooperation Agreements, or LCAs, is needed. Current policy is that LCAs are not even transmitted for review until a General Design Memo or other design document is approved. The actual execution of the LCA takes place only after funds for construction have been appropriated by Congress. The problem with that policy is that local sponsors must work far in advance of the signed LCA to arrange financing and provide the required lands and relocations, with no assurance of an eventual go-ahead for the project.

NAFSMA recommends that LCAs be signed after approval of the Feasibility Report, or certainly, after approval of the GDM. This could be done contingent upon authorization by Congress.

Another issue that merits close attention is new hazardous and toxic waste cleanup language, recently included by the Corps as part of the Local Cooperation Agreements. NAFSMA is concerned about the imposition of the requirements without the benefit of hearings or legislative direction. We believe sponsors should have an opportunity for review and comment on changes which are to be made mandatory provisions of an LCA.

Senator Moynihan. Where is that in your testimony, sir, on what page?

Mr. Sagramoso. On page 6, at the top.

The last item I would like to comment on is the 20 percent limit for increases in total project cost, because it has had the unintended effect of penalizing those sponsors whose project costs are based on factors outside the scope of the plan, such as land costs, since they must then wait for the next authorization cycle to reauthorize the project.

NAFSMA recommends that language be included in the 1990 act to provide additional flexibility in the maximum cost limits to allow for increases in outside factors.

Mr. Chairman, thank you for the opportunity of speaking on behalf of the Association.

Senator Moynihan. I'm not even going to try that acronym.

We had some very specific things there, and thank you. They were very reassuring, the comments about how the 1986 act is moving along.

Senator Graham.

Senator Graham. No questions, Mr. Chairman.

Senator Moynihan. Senator Breaux.

Senator Breaux. Nothing, Mr. Chairman.

Senator Moynihan. Then we thank you for very clear testimony, for very cooperative testimony. I think we've got something moving here. We're back in business. We're developing and learning our way, as we ought to do, but there's nothing in the least the matter with that. We have had the long, fallow period where nothing happened.

Mr. Coyne, we particularly thank you for coming.

We will pay attention to all these matters, and we will have a bill. You may be sure of that. Thank you, gentlemen.

Our second panel is a panel devoted to specific projects in specific areas, and there are four witnesses whom we would like to welcome. First, Mr. Ronald Besson, who is the President of the West

Jefferson Levee District—Mr. Besson; Mr. Ely, of course, we welcome you to the table once again, having been introduced by Senator Reid; Mr. Emmett Lee, who is Director of the Tampa Port Authority; and finally, Mr. Steven Markey, Director of Supply and Distribution of Gardinier, Inc.

I believe that Senator Breaux would like to introduce Mr. Besson, if you would, sir.

Senator BREAUX. Just very briefly, Mr. Chairman, thank you very much.

Ron Besson is president of one of the levee districts in the New Orleans Area, the West Jefferson Parish Levee District. Without the levees, New Orleans would cease to exist, and we would not want that to happen. He is chairman of that levee district, but today he is presenting testimony on behalf of the Lower Mississippi Valley Flood Control Association, the entire association.

It is interesting to note, Mr. Chairman, that since we have passed the new law, in the last three years I think there has not been a single cost-sharing agreement worked out in the lower Mississippi Valley since the passage of the new cost-sharing program, indicating there are some real problems with cost-sharing. I think we need to take a look at what needs to be done to correct that. It's an area that probably has more flood control projects than any other part of the country, and yet we haven't had a single agreement signed since the law was adopted. I am anxious to hear what their suggestions are.

Senator MOYNIHAN. We will look forward to that, Senator.

May I say it's not just those levees. If that dam at the Atchafalaya ever gives way, New Orleans will be in a rich agricultural district.

Senator BREAUX. New York would then definitely get the Democratic National Convention.

Senator MOYNIHAN. Senator Graham, I know you want to introduce both Mr. Lee and Mr. Markey.

Senator GRAHAM. Yes. Thank you, Mr. Chairman.

Mr. Emmett Lee is Director of the Port of Tampa, which is one of the rapidly expanding ports in our Nation. It has become a major center for industrial resource and agricultural traffic in our State and Nation. I have had the opportunity to know Mr. Lee over a number of years, and he has provided outstanding direction to that port. He is going to be speaking today, as will Mr. Markey, particularly on the issue that was raised in the previous panel, the single beneficiary policy.

Mr. Markey represents one of the large phosphate chemical firms in our State. I am rather taken aback, Mr. Chairman, that you did not realize the full cosmopolitan nature of the community of Tampa. We extend an invitation to you to come and visit.

Senator MOYNIHAN. There are five flags down there somewhere.

Senator GRAHAM. That's when we're being modest.

Senator MOYNIHAN. When you're being modest?

Senator GRAHAM. And we grow in wisdom and understanding.

Senator MOYNIHAN. Not a moment too soon. We thank you very much.

Gentlemen, good morning. Let's begin with Mr. Besson, as is the ranking of our witness list.

Good morning, sir.

STATEMENT OF RONALD R. BESSON, PRESIDENT, WEST JEFFERSON LEVEE DISTRICT, LA, REPRESENTING THE LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION

Mr. **Besson**. Senator Moynihan, gentlemen, staff members, thank you for the opportunity of coming from Louisiana to talk to you folks this morning. It is indeed a pleasure.

As my favorite Senator, Senator Breaux from Louisiana, stated, I am here today representing the Lower Mississippi Valley Flood Control Association. We would like to speak to you today about our concerns with the criteria being used to implement the ability of non-Federal interests to pay for cost-sharing for flood control work, as specified in the Water Resources Development Act of 1986.

We have described the Lower Mississippi Valley Flood Control Association in detail in our written statement, and I won't go into that.

During discussions that preceded passage of the Water Resources Development Act of 1986, the Flood Control Association took the position that any new, additional cost-sharing for the remaining work necessary to complete the flood control portion on the Mississippi River and Tributaries Project would be unrealistic, since the project was and is a single multi-State project that was conceived to protect folks in the lower Mississippi Valley from waters that come down over more than 41 percent of the country, from as far east as New York and as far west as Montana.

Needless to say, we didn't win that particular fight about cost-sharing, but we have accepted that fact. We are still hoping that this cost-sharing can be considered in such a manner as to make certain that beneficial projects will not be rejected simply because non-Federal interests lack the dollars necessary to finance their share, and that's what I would like to discuss with you today.

As this committee knows, there was considerable concern expressed by numerous Members of the Congress about the ability of a non-Federal interest in a low income area with limited resources to meet the increased cost-sharing requirements. As a result of that concern, the law established a requirement that any cost-sharing agreement consider the ability of any non-Federal interest to pay the local share of flood control.

I won't take the time to quote all of the sentences that expressed their concern about the ability of small communities in those economically-depressed areas to provide the cost-sharing required by Public Law 99-62, but I would like to quote the distinguished chairman of this subcommittee in his response to Senator Bumpers of Arkansas. Senator Moynihan is quoted as saying, "Beneficial projects should not, however, be rejected simply because non-Federal interests lack the resources to finance their share of the developing cost."

Unfortunately, Mr. Chairman, the Executive Branch is still operating under the false assumption that even the poorest communities and States can afford at least 25 percent of the cost of all economically justified flood control projects.

Today we are here representing those poorest communities and States, and we think no better proof of the fallacy of that assumption is needed than, as Senator Breaux had quoted a moment ago, "More than three and a half years since the bill was passed, not one Local Cooperation Agreement has been signed for a flood control project in an MR&T area." This is in spite of a great need for these projects, as most of us are aware.

This Association has accepted the concept of cost-sharing and the local people for many years have met their requirements and done their share. We cannot agree with the Executive Branch's criteria for the ability to pay, and we do not believe it was the intent of Congress.

The local cost-sharing requirements established by the Secretary take into account the benefit-to-cost ratio of a project as a measure of a local interest's ability to pay. The benefit-to-cost ratio for the flood control features of a project is divided by 4, and expressed as a percentage. It is assumed that the local sponsor can afford at least that percentage of the project cost. We disagree with the concept of using computed benefits of a project to determine the sponsor's ability to pay for several reasons. Let me just list a couple of them.

The benefit-to-cost ratio development is subject to bureaucratic modification and administrative changes that are completely unrelated to a local entity's ability to cost-share.

Number two, flood control benefits represent prevention of economic losses, but do not produce cash flow which can be used to meet the financial costs.

Last, benefits currently utilized in benefit-to-cost ratio analysis are, by definition, national economic development benefits and do not represent measurement of direct financial improvements available to the local sponsor, such as an improved tax base, etc.

Let me say also that during discussions, the conference committee stated that "the ability to pay is to be applicable to all projects with flood control benefits, regardless of the project's overall benefit-to-cost ratio."

The second step of the Secretary's criteria takes into account the economic condition of the community and the State in which the project is located. The formula developed by the Secretary uses per capita personal income as a measure of economic conditions in determining ability to pay. Use of per capita income reflects two of the three factors set out in the report of the Senate Committee on Environment and Public Works in 1985. These two factors are, one, income in relation to need, and two, unemployment. It appears to us that these factors reflect the local area's ability to pay for flood control work or any other requirement placed on the people.

Unfortunately, the Secretary's criteria uses only this second step to determine what he terms an "eligibility factor" that is computed to determine whether a project is eligible to be considered in step one that deals with computed benefits rather than the economic conditions of the community.

Mr. Chairman, we are not alone in our concern with the Secretary's criteria on ability to pay. I would like to cite as just two examples the feelings expressed by two Congressionally-mandated commissions. First, the Mississippi River Commission last year requested that the Secretary of the Army review his criteria to determine whether or not the regulation should be modified to provide more realistic opportunities for economically depressed communities and States in order to participate in flood control projects.

Second, the Lower Mississippi Delta Development Commission, established by law in 1988, has stated that a likely proposal for their 10-year strategic plan to improve the Delta's economic situation is the "easing of the three-year-old Federal law that requires communities to provide one-fourth of the cost of flood control projects to earn Federal funds."

Mr. Chairman, we understand that only the wording in the act can be taken as a matter of law. The conference reports and comments of individual Members of the House of Representatives and Senate may provide some understanding of the attitudes and opinions concerning the ability to pay provision, but the wording of the law makes it clear that final determinations on ability to pay are made by the Secretary of the Army. For this reason we request that this committee place wording in the 1990 Water Resources Development Act that the determination of the ability to pay the non-Federal portion of the flood control project be based on the economic condition of the community. We believe that the formula used in step two of the Secretary's criteria is a reasonable and prudent way to determine the percentage required and recommend its use.

We recommend procedures that would retain the State and area factors, and therefore assume that the State has equal responsibility with the communities in which a project is located. The constants in the formula also remain in effect, and therefore only about 20 percent of the counties in the United States would pay less than approximately 80 percent of their normal share, and about two-thirds of the counties in the United States would be required to pay 100 percent of the normal share. In other words, the very poorest counties and States would benefit, and we feel that was certainly the intent of the Congress.

The requirement that local interests pay 5 percent of the project in cash during project construction would also be retained. It is our understanding that Congress wanted to retain the cash requirement as an indication that the non-Federal interest had a serious commitment to the project, and we certainly respect that.

We would like to emphasize that water resources projects with proven merit are not a drain on the Federal budget, but are investments for the taxpayers' future. The economics related to water transportation and the importance of flood protection for our agricultural and industrial interests in this Nation are of extreme importance. Such development will add to the job market, increase the gross national product of this great country, and improve the health and well-being of the citizens of the Valley, the poorest area of this country.

These are the real and tangible long-term benefits which will be the direct result of project completion, but they cannot be reached nor realized under the present ability to pay criteria.

We urge this committee to take the necessary steps to allow us to continue making these projects work, and to work with you, the Members of Congress that enact the laws, to allow us to protect the Valley.

I thank you, sir.

Senator **Moynihan**. We thank you, Mr. Besson.

The point made by Senator Breaux is compelling and you have repeated it, that in three and a half years we haven't reached an agreement. Obviously, the time to review the matter is at hand. One elemental fact is that if, in consequence of exposure to flood damage, you have a low level of economic activity, you are by definition not in a position to do the matching which would get you up to the point where you would have a better one.

Senator Breaux, would you mind presiding for just a moment? Mr. Ely, who was earlier introduced by Senator Reid, is next on our list.

Senator **Breaux** [assuming Chair]. Certainly.

Mr. Ely, we will be glad to receive your testimony.

STATEMENT OF JOSEPH H. ELY, CHAIRMAN, PYRAMID LAKE PAIUTE TRIBE

Mr. **Ely**. Mr. Chairman, distinguished members, I appreciate the opportunity to be here and testify before you on this particular issue. I would also like to thank Harry Reid for his introduction, and also for the tremendous amount of leadership he has shown in accomplishing a lot, leading toward the solution of these problems at Pyramid Lake in western Nevada.

For the record, my name is Joseph H. Ely. I am the tribal chairman for the Pyramid Lake Paiute Tribe. I submitted written testimony earlier. I will be brief and try to summarize that testimony.

I think in order to understand what is going on, at least at Pyramid Lake, and what this particular section of the bill does for Pyramid Lake, you have to understand who we are and I have to give you a very brief history on who we are.

We are now called the Pyramid Lake Paiute Tribe, but prior to 1844, when we were discovered by a very prominent explorer by the name of John C. Fremont, we called ourselves Cui-ui Tuccatta, which means Cui-ui eaters. Our lake we called Cui-ui Pah, which means Cui-ui Lake, and the fish that was the main sustenance for our well-being and livelihood was called the Cui-ui. Our legends tell us that those three components were created simultaneously, and we believed then—as we believe now—that if one of those components should disappear, then we cease to exist as a people. So as we testify about this bill and about the recovery of the fishery, specifically the Cui-ui, we are not only talking about livelihood, a fish that is important to the world as being an endangered species, but also, very important to us, a major component of our way of life and who we are.

The Pyramid Lake Paiute Tribe supports and urges your support of the passage of section 203 of S. 2183. The two projects in section 203 correct the delta access problem and restore the lower Truckee River, and fulfill both an obligation of Congress to recover the endangered species, and fulfill the obligation of the Federal Government in regards to its trust responsibility toward Indian tribes and their resources.

Our written testimony covers this in detail, but in short here is what happened and here is how the bill fixes it.

Unfortunately, the Federal Government is the primary perpetrator of our problems at Pyramid Lake. This has led to the consequent demise of the Cui-ui and the Lahontan cutthroat trout. In the early part of this century——

Senator **Moynihan** [resuming Chair]. If you would just allow me to interrupt, I know that Senators Breaux and Graham and Lautenberg would want to hear what Senator Reid said.

We're talking about the very first project of the Bureau of Reclamation. They hadn't quite gotten the hang of it.

Mr. **Ely**. That's it in a nutshell.

In the early part of this century, around 1902, the first reclamation project was authorized by Congress and built. It was called the Newlands Reclamation Project. Up to that point, water had flowed from Lake Tahoe through an area which is now Reno and Sparks, down to Pyramid Lake. When the reclamation project was built, a dam was built about 20 miles upstream from Pyramid Lake, and water was diverted to the Newlands Project. About half of the flow of the Truckee River which normally went to Pyramid Lake was diverted. In the next 40 years, the lake dropped 70 feet.

Senator **Moynihan**. Imagine that.

Mr. **Ely**. Pyramid Lake had its elevation drop 70 feet. Its sister lake, Lake Winnemucca, which was a large wildlife area and which had a lot of wildlife habitat in it, fish and birds, dried up completely. The result of that, as well as the dropping of Pyramid Lake was the loss of about 2 million birds in Lake Winnemucca, which dried up completely. The elevation of Pyramid Lake dropped 70 feet, which resulted in creating a large delta at the mouth of the river where the Truckee entered Pyramid Lake.

The two primary fish, Lahontan cutthroat trout and the Cui-ui, which are both anadromous fish, similar to salmon which are in salt water but which have to spawn in fresh water, were unable to get over the barrier which was here—now the lake was here, and the barrier was here—they were unable to get into the river and spawn. The result of that is that the Lahontan cutthroat trout became completely extinct in Pyramid Lake. We have been able to bring those back through a reintroduction program and hatchery programs which were put together by the Department of Interior and the Pyramid Lake Tribe.

Senator **Moynihan**. Mr. Ely, would you pronounce that a little more slowly? I've never heard of that trout.

Mr. **Ely**. Lahontan cutthroat trout.

Senator **Moynihan**. Oh, Lahontan cutthroat.

Mr. **Ely**. Incidentally, Pyramid Lake holds the world's record prior to the demise of the Lahontan cutthroat trout. It held the record at 41 pounds for a Lahontan cutthroat trout, which stands today as well.

The Cui-ui were unable to get over that delta and spawn. So the downfall of both of the fisheries started then and has continued to decline.

A second act of the Federal Government occurred in the early 1960s when the Army Corps of Engineers, who had their blessings from Congress, were given a project to essentially turn the lower river into a drainage system for the upper Truckee River, which was the area of Reno and Sparks. Reno and Sparks had built their cities on a flood plain and were experiencing floods during heavy water years, so they decided that the way to solve the problem was to turn the lower Truckee River within the reservation into a drainage system. They took the lower Truckee River, which was excellent spawning habitat for the Cui-ui and Lahontan cutthroat trout—it was a slow, meandering, very deep, very narrow riverbed with a lot of trees over it which provided excellent habitat for the Cui-ui and the Lahontan cutthroat trout.

They took this reach of the river, took out all of the trees, took out all the vegetation, straightened the river, made it very wide and very shallow. Well, they did accomplish their primary objective. When the heavy rains and the spring runoff came, Reno and Sparks did not flood, but the problem was that the lower Truckee River did several things.

For one thing, the river became very erratic from the lowering of the lake level by 70 feet. It became very erratic because now there was nothing to hold the riverbanks back, so the water came through very fast. We have on record that sometimes the river channel would jump over 200 feet in one evening, wiping out an entire riverbank which would then silt the river, fill up the gravel beds, and end up at the delta, creating even a greater barrier.

These two problems almost ensure that the Pyramid Lake Paiute Tribe will not be able to recover its fisheries. This particular bill will fix both of those problems.

Number one, the bill authorizes looking into the problem of delta access, which will take a very complicated situation because, as you know, silt and sand are very unstable. It will look into correcting that problem by providing access for the fish.

Second, it will take the river, which has been damaged over the years through the Newlands Project and by the Army Corps of Engineers, and try to return it to a natural state as best as possible. Of course, some areas will have to be artificially taken care of, but it will attempt to take a geomorphic look at the process and again create a meandering channel, revegetate, and allow for better spawning habitat for the fisheries.

I see that my time is almost up so I will be very, very brief.

In closing I would like to say that this particular section of the bill will fulfill several trust responsibilities for the tribe, as well as protecting and recovering the endangered species. It will recover our major traditional life component, which is the Cui-ui. It will enhance and recover the Lahontan cutthroat trout fishery, which is an economic base for us as well as an economic base for the State of Nevada, and certainly could be for the Nation. It will also put together—which is very rare, looking at some of the history of Congress—put together a combination of interests, which are Indian interests, environmental interests, and economic interests.

So we feel this is a very good deal for the Pyramid Lake Paiute Tribe and one that is also very good and beneficial to the Federal Government.

Senator MOYNIHAN. Sir, you make a very persuasive case. Of course, you have Senator Reid as your advocate, which is no small advantage on this committee.

Mr. ELY. A very large advantage, sir.

Senator **Moynihan.** We may look forward to having the Cutthroat Trout Olympics at Pyramid Lake one of these days.

Senator Durenberger, you would just like to have a statement placed in the record?

Senator **Durenberger.** Thank you.

Senator **Moynihan.** You are very kind, sir.

[Senator Durenberger's statement follows:]

OPENING STATEMENT OF HON. DAVE DURENBERGER, U.S. SENATOR FROM THE STATE OF MINNESOTA

Mr. Chairman, I am pleased to be here today to offer my comments on S. 2183, The Water Resource Development Act of 1990.

I am pleased that the Subcommittee has begun consideration of Water Resource Development Act. Earlier this decade, I was very involved in Congressional activities to pass the Water Resource Development Act of 1986 (P.L. 99-662). During Congressional consideration of this Act, it became clear that the huge number of deferred water projects created a legislative logjam which made it difficult to give each project sufficient consideration. Despite the complexity of this legislation, the Committees rose to the task and after great effort, moved this legislation successfully through the halls of Congress and across the President's desk.

Because of the herculean effort needed to consider and pass, the Water Resource Development Act of 1986, I know that my colleagues on this Subcommittee and the Hill in general have a great interest in the timely consideration and passage of water resource development acts. In 1988, Congress considered and passed the Water Resource Development Act of 1988 (P.L. 100-676). The Subcommittee is now beginning its consideration of a 1990 water bill.

I wish at this time to offer a few comments on S. 2183 and to voice a few parochial concerns of mine.

The Chairman's bill addresses a number of my water resource concerns. I note in particular, Section 204, which would resolve the obstacles delaying the process of constructing a Lock Replacement at Sault Ste. Marie. Currently, there is only one so-called "Poe" sized lock at Sault St. Marie. If the operation of that lock is disrupted during the shipping season, it would bring nearly all of the shipping on Lake Superior to a halt. Such an interruption would cause significant economic hardships to shippers moving iron ore and grain out of the Port of Duluth.

I am also pleased that both the Chairman's bill and the Administration's proposal include provisions spurring research and development of magnetic levitation transportation systems. In the early 1980s, I spearheaded efforts to examine the feasibility of high speed rail travel. I am willing to share with my colleagues the findings of that effort which are relevant to the development of magnetic levitation transportation system.

Finally, I am encouraged that the Chairman's bill also addresses a number of ancillary water resource concerns which are designed to facilitate Corps operations.

In closing, I wish to inform my colleague that I have several water project concerns which are not currently before the Subcommittee. Several ongoing flood control projects in my state are likely to exceed the Section 902 limitation before Congress has an opportunity to enact a Water Resource Development Act in 1992. In particular, I am concerned that construction delays might result for the St. Paul, Rochester and Marshall flood control projects. I am working with the Corps and the local project sponsors to prepare legislation needed to keep these projects on schedule.

Senator **Moynihan.** We will move on to Mr. Emmett Lee, who is Director of the Tampa Port Authority.

Mr. Lee, good morning.

STATEMENT OF EMMETT C. LEE, JR., DIRECTOR, PORT OF TAMPA, FL

Mr. **Lee.** Mr. Chairman, we thank you for this opportunity to appear before the subcommittee and testify regarding the Administration's single beneficiary policy.

Senator Graham, we thank you for that kind introduction.

The Port of Tampa is the seventh largest port in the Nation measured in terms of the total tonnage handled. Phosphate and phosphate-related products are by far the predominant cargo shipped through the port. Approximately 23.8 million tons of product from phosphate is shipped from the port to foreign and domestic destinations annually, and additionally, some 6.9 million tons of raw materials used in the production of phosphate products are received through the Port of Tampa from foreign and domestic sources.

Senator **Moynihan**. Where does that originate?

Mr. **Lee**. The incoming cargo, sir, is sulfur, which comes from Mexico. We get some from Louisiana. Ammonia comes from Russia. We get potash from——

Senator **Moynihan**. So you manufacture phosphate?

Mr. **Lee**. The phosphate goes into fertilizer and is manufactured into that product there, in the vicinity of Tampa. That's a great deal of it.

In 1970, Congress authorized the dredging of the main ship channel to 43 feet, and the construction work was completed in 1985. A total of over $200 million in Federal funds was involved in the Tampa Harbor improvements, and the benefits of this Federal investment are evident, as the port annually generates economic output of $5.5 billion and over $600 million annually in Federal corporate and personal taxes.

I testify today to express the Port Authority's concern about a new Corps of Engineers policy which is substituting for the Corps' traditional cost-benefit method of assessing the Federal interest in a proposed navigation project. I am referring to the single beneficiary policy, which has precluded Federal participation in improvements to two channels within the Tampa Harbor complex, the Alafia and Big Ben Channels, both of which connect to the main ship channel and are key to the overall port operation.

In 1988 the Secretary of the Army recommended against Federal participation in Port Sutton improvements, thereby preempting a very favorable report from the Corps of Engineers which found the proposed improvements economically justified, engineeringly feasible, and environmentally acceptable and consistent with the National Economic Development Plan. The same policy stands to undermine the ongoing study to assess the Federal participation in improvements in the Alafia Channel, scheduled for completion in 1990 or early 1991.

In contemplation of the effect of this single beneficiary policy on the study, the Port Authority has committed to fund the incremental improvement of the Alafia Channel, provided the Federal Government would pick up maintenance of the newly-deepened channel, it being a federally-authorized channel in its present state.

Notwithstanding the negligible cost to the Federal Government of maintaining the deeper channel and the legislation which permits same, the Secretary has formally rejected the proposal by the Authority, citing the single beneficiary policy. Assuredly the single beneficiary policy, unless changed, also promises an unfavorable report on the study.

The Secretary of the Army's decision with respect to the Port Sutton and Alafia Channel projects was based in a new policy which appears in a regulation issued in August, 1989. Under the policy, if a single, privately-owned terminal is located on a channel, it is defined to be the only beneficiary of the improvement regardless of the benefits to multiple shippers and shipping companies using that channel. The new policy determines that this single entity situation precludes any Federal interest in the project. Therefore, the Secretary has determined that Gardinier, which is the only terminal operator on the Alafia Channel, is the sole beneficiary of the proposed improvement. Under this policy, ships calling at Gardinier docks would not be beneficiaries of a deeper channel, despite the fact that the ships do not belong to Gardinier. They are chartered by suppliers of raw materials and purchasers of finished products, and would be able to fully load, thus reducing unit cost of moving the product.

In reference to Port Sutton, the Secretary has determined that International Minerals & Chemicals would be the sole beneficiary of the project, notwithstanding the fact that many different shippers use that channel. Indeed, during 1989, 32 percent of the product shipped through IM&C was for the account of others.

The policy is obviously flawed in its application to Tampa Harbor complex, where the many auxiliary channels are independent on each other. There are compelling reasons for considering each of these branch channels as simply another channel serving the total port navigation system rather than as a single channel which benefits a single business entity.

We request that the subcommittee exercise close and careful review of this policy. It sets a dangerous precedent. We thank you in advance for providing a legislative solution which will repeal the single beneficiary policy and codify into law the long-established cost-benefit provisions that have governed Federal projects in the past.

Thank you, sir.

Senator MOYNIHAN. Thank you, Mr. Lee.

Perhaps we should hear directly from Mr. Markey, who is from Gardinier, and connected with this.

Good morning, sir.

STATEMENT OF STEVEN J. MARKEY, DIRECTOR, SUPPLY AND DISTRIBUTION, GARDINIER, INC., RIVERVIEW, FL

Mr. MARKEY. Good morning.

Mr. Chairman, thank you very much for this opportunity, and I would like to thank Senator Graham for his kind introduction.

I am Steve Markey, the Director of Supply and Distribution for Gardinier, Incorporated. Gardinier is a phosphate mining and fertilizer production company, with its fertilizer plant located adjacent to the Alafia River Channel in Tampa Bay, Florida.

The international phosphate market, in which the United States plays a major export role, is intensively competitive. The Port of Tampa is the chief origination point for U.S. phosphate exports and has five phosphate terminals served by federally-maintained channels. Four of the five terminals are served by channels maintained at a depth of 34 feet or more, while the channel serving the Gardinier terminal is maintained at only 30 feet.

Unfortunately, the 30-foot depth restricts the size of vessel and cargo that can be loaded at the Gardinier terminal. In many cases customers must either forego use of Gardinier facilities altogether, or complete cargo loading at a second berth. The latter, of course, increases port congestion and results in higher shipping charges, product shrinkage, and demurrage charges.

In February, for example, Gardinier incurred over $36,000 in demurrage charges for just one vessel when the completion of loading at a second terminal in the port was delayed a full five days. This was not an isolated occurrence.

This situation discourages our customers and other potential shippers, while lessening overall port efficiency and competitiveness. In response my company, with the full support of our sponsor, the Tampa Port Authority, has offered to pay for deepening the Alafia River Channel to 34 feet. However, the Corps of Engineers has taken the position that they will not maintain improvements to Federal channels that serve a single beneficiary. The problem for us arises from the Corps' new definition of a "single beneficiary facility." The Corps now has stretched this concept to apply to single ownership, as well as single use. Ownership, now, is thus the chief criterion for establishing whether a facility serves single or multiple beneficiaries.

Mr. Chairman, we find the Corps' new definition of a single beneficiary completely without merit. At best, it is arbitrary and discriminatory. Assistant Secretary Page wrote Senator Burdick last fall that "only two entities are required to demonstrate widespread and general benefits" from a federally-maintained channel. In other words, because Gardinier has the bad luck to own the only facility on the Alafia River, the Federal Government would turn its back on this terminal, while those terminal owners on the bay who happen to have neighbors receive all the benefits of Federal support.

The Corps' single owner policy confuses and ignores the real issue in assessing beneficiaries of a federally-supported project, namely, whether there are multiple users of the facility in question. In fact, many users benefit or stand to benefit from Gardinier's facility and a deeper Alafia Channel.

For example, as a result of a recent modernization program, 40 percent of Gardinier's present cargo loadout capacity stands ready for other shippers. Four other phosphate producers have expressed interest in regularly using our loadout facilities if the Alafia Channel is deepened. Our terminal capacity for molten sulphur, a major raw material for phosphate fertilizer production, is also undergoing expansion. However, our 30-foot channel will not allow any of the Gulf of Mexico-based fleet of molten sulphur vessels to come in fully loaded. Thus, maximum utilization of this terminal capacity addition to the Tampa Port system will not be realized.

We can only assume that the single owner criterion is being used as a means to block projects in an attempt to protect the Federal budget. In our case, however, Gardinier is prepared to pay for the initial dredging costs to 34 feet. We estimate that any additional cost of maintaining the Alafia Channel at 34 feet will be virtually immeasurable.

Mr. Chairman, we believe that Congress should reverse the Corps' single owner policy and should otherwise ensure that the Corps does not manipulate its single beneficiary rule to deny services to facilities that legitimately qualify for them. The problem is larger than just the Alafia Channel, as you have already heard this morning.

We specifically ask for help from Congress to assure that the Corps of Engineers maintains the Alafia River Channel in Tampa Bay, Florida at a minimum depth of 34 feet. This depth is consistent with the depth of channels serving other phosphate loading facilities on the bay and will help optimize overall port efficiency. Moreover, maintenance at this new depth will not cost the Federal Government any additional money.

Thank you very much for the opportunity to participate in this hearing.

Senator MOYNIHAN. We thank you, Mr. Markey.

Senator Graham would you like to make some comments?

Senator GRAHAM. Thank you very much, Mr. Chairman.

I would like to ask this general question. Based on what has happened in the Tampa Port channels issue, do you see this as a possible precedent which could preclude Federal participation in other economically viable navigation projects across the country?

Mr. LEE. Yes, Senator, I do because the policy is based simply on ownership and not on beneficiaries, truly. In the case of the Alafia and Big Ben Channels, I think it is significant that those two channels collectively handle some 15 percent of the tonnage in the Nation's seventh largest port, which last year handled over 54 million tons of cargo.

I think it is also significant that the Alafia River, which was deepened to its present depth of 30 feet back in 1960, is indeed today a federally-authorized Federal Navigation Channel, and in 1960 its improvement was based upon the same set of circumstances that prevail today. There is a single terminal on that navigation channel, which qualified it in 1960 but which does not qualify it today. But indeed, there are multiple beneficiaries, and in my judgment ownership is not a valid criteria for determining benefits to the public.

Senator GRAHAM. If I could ask one more question?

Senator MOYNIHAN. You may ask as many questions as you want.

Senator GRAHAM. Mr. Lee, you indicated that if the Tampa Port were viewed as a single system, the spinal cord as the main column and then the vertebrae that extend to individual facilities, that it would not come under the single beneficiary rule because each individual channel is used separately. Based on your discussions with the Corps, what is the criteria by which they judge whether they're dealing with a total system or a series of individual parts?

Mr. LEE. Senator Graham, there is a main ship channel extending from the Gulf of Mexico almost 40 miles into the center of the Port of Tampa. The location along that main ship channel of the terminals is largely dictated by geography and hydrography and where a terminal can go. The terminals are located, in many cases, on branch channels off of that main channel simply because that's what nature dictated. In our view, that total complex should be viewed as a system rather than incrementally, as is the case now, where a branch channel that connects to the main channel is evaluated on its own. And where there is a single terminal there, it is disqualified.

Senator MOYNIHAN. That's very much the pattern of ports and estuaries. We have two small channels in New York Harbor that you wouldn't know exist, but they carry more tonnage than the Panama Canal. To say that some single facility on them is a sole beneficiary would just sort of boggle the mind.

We have, as you know, proposals in our draft to address this subject. I hope you would all agree that the Corps is only trying to do what it understands the statute to require. The Corps is not a competitor, not a profit-making enterprise.

Senator GRAHAM. Thank you, Mr. Chairman.

Senator MOYNIHAN. Senator Breaux.

Senator BREAUX. Thank you, Mr. Chairman. Thank you for having these hearings. I think they're very timely. We're hearing some really good information from all of our witnesses today. I am particularly pleased with the comments of our past Chairman with regard to his philosophy as he has stated that beneficial projects that are good should not be not built because of the inability of the non-Federal interest to be able to come up with their share.

Senator Moynihan has also said very clearly that the Corps has the requirement to write the regulations on what the ability to pay means to the non-Federal interest, but this committee and this Congress is going to supervise those regulations and determine our final approval or lack thereof of those interpretations of the law by the Corps of Engineers as they apply these new standards.

I am all for using our extra money that we're going to get as a result of this peace dividend to help East Germany and Poland and Hungary and other nations that need help, but, there are some States here in the United States that need help and there are some highways that are crumbling and some rivers that need to be dredged and sewer and water systems that need to be attended to in this country before we start spending our so-called peace dividend in other areas. This is really what we're talking about right here.

Senator MOYNIHAN. Like Madison, Louisiana; West Carroll, Louisiana; St. Helena, Louisiana.

Senator BREAUX. We're making real progress, and we want to continue it in that regard.

That really is what we're talking about. The area that Ron Besson represents, Mr. Chairman, is this lower Mississippi River area. Last year Senator Bumpers and other members of this committee, along with myself, sponsored legislation creating a Mississippi River Delta Commission to try to help these States because of the poor economic conditions they were in. Most of these States are first in the things that are bad and last in the things that are good if you're talking about unemployment and per capita income.

Mr. Besson, I think you've made some very good points on this. My question is this. It seems that the Corps' suggestion is that there should be a relation between the ability to pay and the benefit cost of a project, and I really don't understand that. It seems that under their suggested formula, the lower the benefit-cost ratio, the lower the contribution from the non-Federal interest; that the better the project is, the more you have to pay from a State that has the lack of ability to pay.

Can you comment on that specifically?

Mr. BESSON. It seems that the criteria that is being used is a national economic benefit. Nationally we may be doing well, but the seven States in the Valley are doing poorly. So if you take that criteria of the national economic benefit and you compare it to the seven States or whatever, then we have a problem.

The other part of this, it is assumed that no matter how poor the community or the State is, they can afford at least 25 percent of the project. That's not true. At a committee that I testified before a couple of weeks ago when we were here in Washington—I think it was your committee, Senator Breaux—we discussed just using my levee board as an ability to pay criteria over the next five, six, or seven years. We will probably have about $200 million of hurricane protection levee projects going under cost-sharing. Our requirement would be about $78 million of local money. At that time I made the comment that there are not too many communities in the entire United States as small as West Jefferson is that could actually come out of pocket with $78 million. But perhaps we could come out of pocket with $68 million or $58 million. Does that mean that we don't want the project because we could not scrape up the other $10 million or $15 million? That's why we are talking about the ability to pay.

We feel that the intent of Congress on the ability to pay is that once you've scraped the bottom of the barrel and you do not have a way to raise any additional money, it does not mean that you don't care or you don't want the project or you don't need the project.

Senator BREAUX. If I could go to the formula that the Corps is working on, number one, they are looking at per capita income but not unemployment and other indications of inability to pay.

Mr. BESSON. Correct.

Senator BREAUX. Our State has had the highest unemployment in the Nation for several years. I would think that that should be factored in in making that consideration.

As I understand the formula, and please comment on this, the Corps is not going to do a project that is below 1.0 on a benefit-cost ratio anyway.

Mr. BESSON. Right.

Senator BREAUX. Under their suggested formula, a project that has a one-to-zero benefit-cost ratio would not result in a contribution no matter what ability they have to pay at all, because they're not going to do a project below a one-to-zero cost ratio. Under that suggested formula, as the committee has written in, the law says 25 to 50 percent local contribution, non-Federal contribution. And then our second aspect, as Senator Moynihan put together, you then look at the local community's ability to pay. It may go below 25 percent if they don't have an ability to pay, but under the Corps' draft formula it would never get under 25 percent because they're never going to do a project with a one-to-zero or less ratio.

Mr. BESSON. Yes, sir.

Senator BREAUX. Isn't that right?

Senator MOYNIHAN. That's a Catch-22.

Senator **Breaux**. It's a defective formula as far as ever being able to bring it down below the minimum contribution. If a community is the most destitute community in the country and has no ability to pay anything and a project is needed, it could never get below that under their suggested formula.

Mr. **Besson**. Yes, sir. And as I mentioned earlier in my testimony, we drain 41 percent of the continental United States. The water is going to flow past their doors, regardless of whether the project is completed or not, and if it floods the Federal Government is going to pay for it anyway.

Senator **Breaux**. So I guess the point that you are suggesting in your testimony is that you do away with that second division-type of formula.

Mr. **Besson**. Yes.

Senator **Breaux**. You just look at the ability of the community to pay, taking into consideration everything that you would normally take into consideration.

Mr. **Besson**. Yes, sir.

Senator **Breaux**. All right. Well, I think that has been very helpful.

Maybe the Chairman has indicated this, but I understand, Mr. Chairman, that there would be a briefing by the Corps this afternoon in this room at 2:00 p.m. I guess everyone is welcome from a staff standpoint. It will be about ability to pay.

Senator **Moynihan**. Right.

Senator **Breaux**. That would be helpful, I think, to everybody.

Senator **Moynihan**. If I could just add again, there is a particularly sensitive point to be reached where the ability to pay—a low level of economic activity—is a reflection of the dangers associated with water control, flood control, that we propose to eliminate or minimize. If because you are liable to flooding you have no factories, you therefore can't get up your cost-sharing to put up the levees that will get you the factories that would enable you to pay. That sounds about right for Government formulas.

We will work on that. Thank you, sir.

Mr. Ely, I know Senator Reid wanted to be here. He has some questions—oh, you have those questions. Will you see that the committee gets answers in a fair time?

Mr. **Ely**. Yes, Mr. Chairman, I will. (See p. 253.)

Senator **Moynihan**. You are still especially welcome. You have come the farthest, and we want you to know that you have a very compelling case.

You have all been very helpful to the committee. We appreciate it. This will be the middle of the process, or getting toward the end, but by no means is it over. You are in good time. Thank you, gentlemen.

Good morning to our concluding panel: Mr. Barry Palmer, Executive Director, Association for the Development of Inland Navigation in America's Ohio Valley, or DINAMO, as we heard earlier; and Mr. Roy Gray, Assistant to the Chief, Watershed Project Division, U.S. Soil Conservation Service. Good morning.

Mr. Palmer, we welcome you, sir.

STATEMENT OF R. BARRY PALMER, EXECUTIVE DIRECTOR, THE ASSOCIATION FOR THE DEVELOPMENT OF INLAND NAVIGATION IN AMERICA'S OHIO VALLEY

Mr. **Palmer**. Thank you, Senator, Mr. Chairman. I have a number of other guests with me this morning.

Senator **Moynihan**. Would you introduce them?

Mr. **Palmer**. I would be delighted to. Thank you, sir.

I have with me, on my far right, Mr. Frank Martin, who is representing Governor Evan Bayh of Indiana. He is Executive Director of the Indiana Port Commission.

Senator **Moynihan**. Mr. Martin, we welcome you here.

Mr. **Martin**. Thank you, sir.

Mr. **Palmer**. To my far left, Mr. William Bowker, who is here for Governor Wallace Wilkinson of Kentucky, and Mr. George Evans, who is the Special Assistant to the Governor for Coal and Energy Policy. And on my immediate left, Mr. William Hahne, who is Manager of Raw Materials for USX, U.S. Steel Corporation in Pittsburgh, Pennsylvania. Also, Mr. Michael Toohey, who is the legislative representative of Ashland Oil Corporation.

Senator **Moynihan**. Mr. Toohey, we welcome you to the committee.

Mr. **Palmer**. I am going to be very brief and ask them to be very brief.

We are here to urge Congressional authorization—an emergency authorization, a contingent authorization—of a number of projects on the Ohio River Navigation System, including the McAlpine Locks and Dams on the Kentucky-Indiana border, improvements at Monongahela River Locks and Dams 2, 3, and 4, and Marmet Lock and Dam on the Kanawha River in West Virginia.

Let me just get right to Mr. Martin from the Indiana Port Commission. I think his remarks will take a minute and a half.

Senator **Moynihan**. Take your time. You have come a long way to be here, Mr. Martin. We welcome you.

STATEMENT OF FRANK MARTIN, DIRECTOR, INDIANA PORT COMMISSION, REPRESENTING THE GOVERNOR OF INDIANA

Mr. **Martin**. Thank you, Senator.

I'll abbreviate my remarks, Senator, by just saying that I am here representing Governor Bayh and the public port system of the State of Indiana. Of course, we operate three public ports in the State. As we have been commonly referred to, along with our sister States in the midwest, the "rust belt States" are going through tremendous economic change, largely and directly related to the waterway systems of our States. Just in the last year alone we have had over $1 billion in new projects directly related to the waterways.

In addition to the cargoes moving through our ports, we have large industrial complexes adjacent thereto.

I just want to say that the McAlpine Lock and Dam on the Ohio River at Louisville-Jeffersonville is of grave concern. Governor Bayh has taken a very high profile position relative to this 60-year-old, grossly deteriorated——

Senator **Moynihan**. Those are the falls of the Ohio River?

Mr. MARTIN. Yes, sir.

Of the 38 million tons of cargo that are shipped through the valley system, 14 million moves through Indiana; 10 million tons which are received, and 7 million tons which are bound for the State of Indiana, while imports and exports amounted to 11.4 million and 14.4 million tons, respectively.

I just want to say, Senator and members of the committee, that this directly relates to our ability to try to create new job-intensive and capital-intensive projects in the State of Indiana. We have just completed a new project which is a joint venture with a Japanese firm on steel-belted tires, which is a $60 million project, and their consultant said——

Senator MOYNIHAN. Where is that?

Mr. MARTIN. That's at Jeffersonville.

Senator MOYNIHAN. At Jeffersonville?

Mr. MARTIN. Yes, sir.

Senator MOYNIHAN. That old Colgate plant and that shipyard are not going to be the only things in Jeffersonville?

Mr. MARTIN. That's correct, Senator. You would feel great if you saw what is going on in southern Indiana and in our sister State to the south in Kentucky, in the area of economic development.

Senator MOYNIHAN. Don't let Senator Breaux know this, but The Economist had a long essay last week on the Ohio Valley and described Pittsburgh to Louisville, the British and the French, and Cincinnati in the middle, and said that it is America's longest and most important river, of which the Mississippi is a tributary. That's what it said. I didn't say it.

Senator BREAUX. That's all right, Mr. Chairman. They still have to get to the Gulf of Mexico.

Mr. MARTIN. Well, Senator Breaux should know that we just opened our office in New Orleans, and we hired Captain Joffrey, the former Port Director, as the marketing person for the State of Indiana.

We have a major tubing plant in Clark, adjacent to the lock and dam. This is a project that will either go to Canada or the United States. We are working with ADM on an ethanol plant, to locate under the Clean Air Act. I think there is a lot of activity in that area. That's about a $300 million project for two jobs.

We finally made the last selection list for the Port of Louisville, Kentucky or the Port of Indiana at Jeffersonville for a $320 million new mini-mill to be built by Chaparral Steel Company of Texas, which will be 400 jobs. Also, a major blending operation in that same location. We have just completed a $25 million coal transfer facility with MAPCO. We are working with Burlington Northern on the transfer of western coal into that facility.

The problem, Senator, is that each one—and I'm not just saying this; it's not a well-kept secret any more about the condition of the McAlpine Lock, everybody knows about it, everybody knows it's about ready to collapse. It is a critical problem. In every company that we're working with, consultants come forth and say, "We've got to see what is going to happen with McAlpine before we decide what we're going to do on a commitment to you State or Kentucky." So it's really a critical problem, Senator, believe me. That's why Governor Bayh, Senator Luger, and Senator Coats have taken a very high-profile, committed position on that issue.

Thank you very much, sir.

Senator MOYNIHAN. Consider the committee seized of this subject. There can be no question about the matter in the mind of the Chairman, and we will proceed.

Mr. PALMER. Mr. William Bowker from the Governor's Office of Coal and Energy Policy, Commonwealth of Kentucky.

STATEMENT OF WILLIAM H. BOWKER, REPRESENTING THE GOVERNOR OF KENTUCKY

Mr. BOWKER. Thank you, Barry.

Thank you, Mr. Chairman. It is an honor to have this opportunity to address you and the subcommittee on this matter of great importance to the Commonwealth of Kentucky. Today I will focus on the coal industry.

As Barry said, I am here to represent George Evans, who is Governor Wallace Wilkinson's Special Assistant for Coal and Energy Policy. Mr. Evans is also a member of the Executive Committee and Board of Directors of DINAMO. We have been a very active member since the beginning of DINAMO in 1981.

We strongly support all of the improvements that DINAMO is pressing for on the Ohio River Navigation System because all of these are very important to Kentucky.

I would like to stress the importance, as Frank did, of the improvements that are being considered for the McAlpine Lock and Dam near Louisville. Present and future needs indicate that construction of this proposed second 110-foot by 1,200-foot lock is critical. Already inadequacies at the present facilities have caused costly delays at this strategically-located facility, which is located, of course, between Pittsburgh and the Gulf at New Orleans.

Projected growth in river traffic indicates that delays and losses to commerce will increase significantly unless the proposed improvements are made.

The Ohio River system is vital to Kentucky's commerce. In addition to large quantities of petroleum, chemicals, steel aggregates, and agricultural products, Kentucky ships through 71 river terminals about one quarter of its annual coal production on the Ohio River Navigation System. Coal is a $4 billion industry in Kentucky. It employs 32,000 miners, about 78,000 persons in total. It contributes to the Commonwealth several hundreds of millions of dollars each year in revenues.

The Kentucky coal industry is facing change and challenge in coming years as never before. There will also be opportunities, Mr. Chairman, particularly in the export market. Consequently, we urge this committee to ensure through major improvement to the McAlpine Lock and Dam that the Kentucky coal industry can continue to contribute to the economic growth of Kentucky and the Ohio Valley and to the energy security of the United States.

Thank you, Mr. Chairman.

Senator MOYNIHAN. It makes perfect sense to this Senator. We thank you, sir.

Mr. PALMER. Mr. William Hahne, USX Corporation.

STATEMENT OF WILLIAM J. HAHNE, MANAGER, TRAFFIC, RAW MATERIALS, USX CORP.

Mr. HAHNE. Mr. Chairman, I really appreciate the opportunity to express the views of USX in the matter of Locks and Dams 2, 3, and 4 on the Monongahela River. My name is William Hahne, and I am the Manager of Traffic for Raw Materials for USS, which is a division of the USX Corporation. I have the responsibility of arranging for all of the inbound raw materials, namely coal, coke, ore, and limestone, for the U.S. Steel plants in their use of U.S. Steel facilities.

I am here today to urge the conditional authorization, subject to a final report of the Chief of Engineers, of improvements to Locks and Dams 2, 3, and 4 on the Monongahela River. The Ohio and Monongahela Rivers are of particular importance to our steelmaking operations. U.S. Steel's Clairton Works, which is located on mile point 19 on the Monongahela River, has prevailed—with its access to lower cost transportation—as the principal coke-making facility of the USX Corporation. As expressed by Senator Heinz, not only is Clairton Works in its coke production of vital importance to our steel operations right there in Pittsburgh, but we are major suppliers of coke to our other steel facilities that are located near the Philadelphia, our Fairless Works. Also, we supply about 30 percent of the coke requirements at our Gary Works, which is by far the biggest steel complex in the United States. We also supply coke, 100 percent, to Lorain-Kobe. We just recently had a joint venture with our Lorain Works in Lorain, Ohio, and Kobe Steel, and also to our Fairfield, Alabama Works. It's near Birmingham, Alabama.

Clairton Works processes about 6.2 million tons of coal per year, which generates about 4.6 million tons of coke. We have invested $38 million recently at Clairton Works in terms of modernization of that facility, as well as expansion in its capacity.

The increased costs associated with bringing in coal by any other means other than river would undoubtedly force us to, in effect, shut our Clairton Works down and look for off-shore sources of coke, which would be much more expensive, to continue our steelmaking facilities.

Mr. Chairman, we are asking for conditional authorization of improvements on the Monongahela to take care of Locks and Dams 2, 3, and 4. I have visited these facilities myself several times. I have been with U.S. Steel Corporation for 38 years, and started myself at Clairton Works in 1952. The Corps of Engineers tells me that the age, the deterioration, and the structural instability of Dams 2 and 3 is such that there is a substantial chance that some of the components of these locks will fail by the year 2000. Conditional authorization will expedite improvements to these locks and dams, so vital to steel, coal, and the economy of the industrial heartland.

Again, sir, I thank you very much for the opportunity and I appreciate your indulgence and interest in this matter. Thank you, sir.

Senator MOYNIHAN. Well, we thank you.

There's a lot of good news, in a certain sense, in what we've been hearing. The steel industry is still around after all, isn't it? I'll tell that to Mr. Frank Fenton, a friend of mine.

Mr. Palmer.

Mr. **Palmer**. Yes. I'd like Mr. Toohey just to make a couple of brief remarks.

Senator **Moynihan**. Sure.

Come up, Mr. Toohey.

STATEMENT OF MICHAEL J. TOOHEY, ASHLAND OIL, INC.

Mr. **Toohey**. Thank you, Mr. Chairman. It's a pleasure to be here today. I represent Ashland Oil, a very diverse energy company with operations in Ohio and Kentucky, based in Kentucky.

We would not exist were it not for the inland waterway system. We also operate the largest inland barge fleet in America.

We come here today to ask your support for the McAlpine replacement project. It is on the most dangerous section of the Ohio—as you noted earlier, the falls of the Ohio. We transship through McAlpine daily. We stand ready to pay for that facility through the inland barge fleet, our fuel tax. We expend about $1 million a year currently for that tax. We actively support the activities of DINAMO and urge your favorable support for this project. We appreciate the comments that you have made already today about this project.

Senator **Moynihan**. Well, we appreciate that. It couldn't be more concise.

Mr. Palmer, do you want to wrap up?

Mr. **Palmer**. Sure.

I would ask, Mr. Chairman, that the remarks of all of the witnesses for DINAMO, and additionally those of Mr. Mark Gabor, the National Legislative Representative of United Mine Workers, be included in the record, sir.

Senator **Moynihan**. Of course. They will be included as submitted.

Mr. **Palmer**. Thank you very much, Mr. Chairman.

Senator **Moynihan**. Thank you.

Senator **Moynihan**. Dr. Dickey, don't leave. We're going to ask you a question after we hear from Mr. Roy Gray, our final witness.

STATEMENT OF ROY M. GRAY, ASSISTANT TO THE CHIEF, U.S. SOIL CONSERVATION SERVICE

Mr. **Gray**. Mr. Chairman, I am Roy Gray, Soil Conservation Service, and I am happy today to have the opportunity to appear before the committee and testify in support of the Little River Watershed Project in Kentucky. I am going to summarize my remarks and ask that they be included in the record.

Senator **Moynihan**. Of course.

Mr. **Gray**. The south fork of the Little River Watershed is located in Christian and Todd Counties in Kentucky, and is 42,800 acres in size. The city of Hopkinsville has a population of 27,864, and is the county seat of Christian County, Kentucky. Crofton, Pembroke, and the Fort Campbell military base are other populated areas in the watershed.

Floodwaters from the south fork of Little River cause significant agricultural and urban damages. Average annual damages in the 2,000-acre flood plain are estimated to be $192,700 a year. There are 227 residential, commercial, or industrial properties that are damaged by flooding. Of these, 137 residences and businesses suffer first floor damages from the 100-year frequency flood. In addition, many residences in the lower and middle section of the flood plain are subject to even smaller, more frequent floods.

Current water supplies for the city of Hopkinsville are provided by two reservoirs and a rock quarry on the north fork of the Little River, and are supplemented by the base flow of the river. The present daily use almost equals the daily capacity of our current water supply. The Hopkinsville Sewer and Water Commission projects the need for an additional 5,243 acre-feet of water to meet future needs.

The principal project measure for the south fork of the Little River Watershed Project consists of a multiple-purpose structure to provide floodwater storage and municipal and industrial water supply. Installation of the structure will reduce floodwater and sediment damages to 1,700 acres of agricultural flood plain, 227 residential, commercial or industrial properties, 11 bridges, and 7 miles of road.

The plan calls for the works of improvement to be installed over a three-year period. The local sponsors will secure easements and rights of way during the first and second year, and construction is expected to begin in the third year.

The estimated cost of the project is approximately $3.39 million, of which $868,000 is Federal Public Law 83-566 funds. The rest will be paid by the local government. The Federal cost runs about 25 percent and the local contribution runs about 75 percent in this case.

With that, Mr. Chairman, I will conclude my testimony and we will try to answer any questions that you might have.

Senator MOYNIHAN. It's not everyday we hear of a 75 local/25 Federal split.

It sounds like a good project.

Mr. GRAY. Thank you, sir. I think it's a project that both our agency——

Senator MOYNIHAN. In your professional judgment, we ought to do this?

Mr. GRAY. Yes, sir. We think it's a good project.

Senator MOYNIHAN. Well, we have the greatest respect for the Soil Conservation Service. And if you say so, we have listened with attention.

Mr. GRAY. Thank you, sir.

Senator MOYNIHAN. We thank you gentlemen——

Mr. MARTIN. Senator, could I just add one other point?

Senator MOYNIHAN. Please.

Mr. MARTIN. I know of your support for the American shipping industry. The Jeffboat, which you mentioned before—or someone mentioned before—we have 400 jobs now created. That used to be the largest shipyard in inland America. It is back up. We now have orders in for at least the next two years. It is a project that also sits adjacent to McAlpine Locks.

Senator MOYNIHAN. Not to tell tales, but I spent a year at Jeffersonville High School in my youth.

Mr. MARTIN. I knew you were familiar with the area, sir.

Senator MOYNIHAN. The Red Devils basketball team.

Gentlemen, thank you very much.

I would now like to ask Dr. Dickey if he would come forward for a moment, just to ask you, sir, how does the Corps feel about this proposition of contingent authorization of lock projects? We don't expect you to have a policy paper in your pocket, but perhaps you have a judgment.

STATEMENT OF G. EDWARD DICKEY, ACTING DEPUTY ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS

Mr. DICKEY. Thank you very much, Mr. Chairman.

We have heard here today, of course, of the value—indeed, the necessity—to continue our water resources project investments. We all recognize that many——

Senator MOYNIHAN. Stop. Stop. Nobody talks like that. You've heard about McAlpine Dam, you've heard about Number 2, 3, and 4, and you've heard about a lot of economic things going on, okay. And you've heard people say they'd like to have this.

Mr. DICKEY. Yes. I think the issue here, Mr. Chairman, is one of process. We believe that projects should not be authorized until they have been through the study process, through the Executive Branch review process, and submitted to the Congress officially by the Secretary.

These projects have not had that process completed, and therefore we would argue that their authorization is premature.

Senator MOYNIHAN. Okay. But you do understand that if there is a contingent authorization, it would be contingent upon your approving it?

Mr. DICKEY. We appreciate that, Mr. Chairman. Certainly, a contingent authorization is preferable to an unequivocal authorization——

Senator MOYNIHAN. We're not trying to hammer through anything, but there are people in the Ohio Valley who need to tell potential investors who have a choice of Canada or someplace else, that the committees concerned want this dam and have asked the Corps to do it, and the Corps is going to say yes when they look at this. You are; I know you are.

Well, I got your point, and I didn't want to put you in the situation of having to speak for the Administration when you haven't had a chance to pass it through. But I do want to make the point that the word "contingent" means that nothing happens until the existing processes have been completed.

Mr. DICKEY. Noted.

Senator MOYNIHAN. Again, thank you very much, and thank you for being here. I'm sure you've learned things that we needed to know that you were interested in knowing. Again, we appreciate it.

Finally, I would like to put a statement by Senator Chafee and a statement by Senator Johnston in the record.

[The statements referred to follow:]

STATEMENT OF HON. JOHN H. CHAFEE, U.S. SENATOR FROM THE STATE OF RHODE ISLAND

Mr. Chairman, today I am pleased to join with you and Senator Symms for the subcommittee's second hearing on S. 2183. Our effort represents a continuation of the Environment Committee's commitment to enact authorizing legislation for the United States Army Corps of Engineers Civil Works Program on a biennial basis.

As you know, Mr. Chairman, the 1970's and early 1980's saw a departure from the previous practice of approving omnibus bills and predictable appropriations to fund the construction of water projects. In 1986, however, we broke the logjam. After years of legislative-executive policy confrontations over the role of the Federal Government in water policy, the 99th Congress approved the Water Resources Development Act of 1986.

The 1986 act was truly landmark legislation in the area of water policy and formed the basis of the Water Resources Development Act of 1988 and the bill we are reviewing today. Mr. Chairman, S. 2183 is a straightforward piece of legislation, authorizing eighteen water resources projects from across the country. The bill also contains several project and corps policy related provisions.

As you know, Mr. Chairman, today I introduced the administration's water resources legislation. The initiative is comprehensive and underscores the balance between Federal and non-Federal responsibilities. I am interested particularly in the proposals for extending the beneficiary pay principle to the Flood Plain Management Services Program and the Planning Assistance to States Program. As the committee reviews S. 2183 and the administration's proposal, however, it is imperative that we remain faithful to the principles of the 1986 and 1988 acts.

Let me finish by saying that the goal of our effort is to authorize a steady flow of sound projects for the Army Corps of Engineers. Mr. Chairman, I intend to work closely with you and our colleagues on the committee to report an economically sound and environmentally sensitive piece of legislation.

STATEMENT OF HON. J. BENNETT JOHNSTON, U.S. SENATOR FROM THE STATE OF LOUISIANA

Mr. Chairman, I understand the Environment and Public Works Committee will soon consider the Fiscal Year 1990 Water Resources Development Act Authorization. I am requesting today that the Committee include in its bill language which would add 12,000 acres of bottomland hardwoods near and adjacent to the Bayou Bodcau Wildlife Management Area in Bossier Parish, Louisiana to the lands the Army Corps of Engineers is authorized to consider for acquisition in mitigation of fish and wildlife losses caused by the Red River waterway project. This is consistent with the inclusion of Loggy Bayou Wildlife Management Area in Bossier Parish, Louisiana in the Water Resources Development Act of 1986, Public Law 99-662. I have attached a copy of the amendment to my statement for inclusion in the record.

My request would increase the options available to the Corps in meeting its mitigation responsibility for the Red River waterway project. I feel strongly that the Corps should have the option to purchase this land because the Bodcau tract is one of the few remaining forested wetland areas in northwest Louisiana. As such, it is the habitat of a wide variety of flora and fauna, including species increasingly threatened with extinction. The overhead canopy of hardwoods in the Bayou Bodcau floodplain consists of water oak, overcup oak, willow oak, shumard, white and cow oak. Bayou Bodcau is home to one of the few wild turkey populations remaining in north Louisiana, as well as to whitetail deer and game animals. Woodducks and migratory ducks visit these wetlands on their way south, and birds of many species use them for nesting, feeding, and cover.

Bayou Bodcau is a resource for naturalists, for sportsmen and for all those concerned with flood control, abundant supplies of clean water and the preservation of our wildlife heritage for the next generation. Its acquisition has the support of the Louisiana Legislature, the Red River Valley Association and the Red River Wetlands Coalition, a coalition of community and statewide citizen groups and individuals committed to saving Louisiana's vanishing wetlands.

I look forward to working with you in passing this bill at the earliest possible time. I commend my colleagues on the Environment and Public Works Committee for their hard work on this legislation and strongly urge your support for the addition of the Bayou Bodcau tract.

Senator **MOYNIHAN**. We thank our reporter and we thank our staff. And with that, we are adjourned.

[Whereupon, at 12:21 p.m., the subcommittee was adjourned, to reconvene at the call of the Chair.]

[Statements submitted for the record follow:]

STATEMENT OF HARRY N. COOK
PRESIDENT OF THE NATIONAL WATERWAYS CONFERENCE, INC.
BEFORE THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
WATER RESOURCES, TRANSPORTATION AND INFRASTRUCTURE SUBCOMMITTEE
UNITED STATES SENATE, WASHINGTON, D.C.

April 19, 1990

My name is Harry N. Cook, and I am President of the National Waterways Conference, Inc. The Conference is a nationwide association of waterway-related businesses, industries and agencies joined together since 1960 for the purpose of promoting a better understanding of the public value of navigation and water resources programs and encouraging sound and far-sighted national waterways policies. Our membership, numbering some 400 firms and organizations, includes waterway shippers, bargelines and other water carriers, port commissions, river terminals, shipyards and repair facilities, marine insurance and other waterway services, dredging companies, river valley associations, flood control districts, water management agencies and related waterway interests.

We welcome this opportunity, Mr. Chairman, to present our views on the Water Resources Development Act of 1990. First of all, we applaud your efforts to enact authorization legislation on a biennial basis. Following passage of the historic 1986 Act, legislation was approved in 1988, and we look forward to the enactment of a new bill in 1990. A two-year cycle for water project authorization measures is imperative if the water resources infrastructure is to keep pace with water resources needs.

On the inland navigation system, for instance, numerous locks and dams are approaching -- if not already past -- the end of their 50-year design life. Because of the 16-year stalemate in project authorizations, which was ended by the 1986 Act, the replacement ofoutmoded and dilapidated locks fell far behind schedule. The 1986 Act authorized the replacement of seven congested locks, and the 1988 Act included one major inland project: Olmsted Lock and Dam on the Ohio River. Many other shallow-draft navigation facilities are either wearing out or experiencing delays, or both, and thus demand prompt attention. For that reason, we urge you to stick to the biennial authorization schedule, so that meritorious lock replacements and other water projects can be authorized on a regular and timely basis.

Conditional authorizations. On March 1, 1990, Maj. Gen. Patrick J. Kelly, Director of Civil Works for the Army Corps of Engineers, listed 21 proposed water projects recommended in feasibility reports approved by the Chief of Engineers. By that date, however, the Office of Management and Budget (OMB) had completed its review of only five of the projects, none of which involves navigation. In submitting its draft bill, the Administration contended that authorization legislation should include only those projects which "have fully completed the Administration's planning and policy review process."

Because authorization legislation is considered no more often than once every two years, we believe the Committee should give serious consideration to conditional authorizations -- authorizations contained in Water Resources Development Acts which are contigent upon subsequent Administration approval.

This would allow for the Administration to complete its planning and policy reviews but, in the case of worthy projects, provide a mechanism for these projects to move ahead to the appropriations stage in a timely and expeditious manner, without being subjected to lengthy delays at the Washington level.

Such a procedure would be especially advantageous in the case of lock-and-dam replacements for existing facilities which are in danger of failure or which, for other reasons, require attention in the near term. It is not in the public interest for the authorization process to be used arbitrarily to ration the number, size or cost of water projects or otherwise delay their construction because of fiscal policy. There is already Federal/non-Federal cost sharing, and it is the responsibility of the Appropriations Committees to apportion the available funds, based on the President's recommendations and those of the Inland Waterways Users Board and a determination of public needs and priorities.

"Federal interest." On August 31, 1989, the Army Corps of Engineers issued a regulation limiting Federal participation in civil works projects which are deemed to serve directly a single entity. This policy statement classifies project improvements in terms of the ownership of waterway-oriented properties rather than the beneficiaries served. In the case of navigation improvements, the policy bars Federal participation in a channel serving a private terminal regardless of the number of shippers involved or the overall savings in transportation cost provided, which are the traditional tests.

At a time when the Federal government is actively supporting the "privatization" of transportation services, as enunciated in the U.S. Department of Transportation's recent national transportation strategy, such a change in Federal policy seems short-sighted. If a private company owns its own terminal and handles only its own products, the application of such a "single-owner" policy would appear to be in order. But if the terminal serves a variety of shippers who share in the transportation cost savings afforded by a Federal channel, then its provision is in the Federal interest. The same general principle applies to flood control projects benefitting a large number of beneficiaries and providing tangible flood damage reduction, even though they may be owners, partners or tenants.

The multiple-beneficiary category of such navigation and flood control projects provides a sufficient test of the Federal interest in water resources projects. The Administration should not arbitrarily decide when a project is or is not in the Federal interest, whether based on "government theory" or "economic theory." Only the Congress and the President, acting in concert, can make such determinations. Until such time as more definitive legislation can be developed, we support the criteria stated in Section 301 of S. 2183, the Water Resources Development Act of 1990, for ascertaining the Federal interest.

"Water control plans." In recent years, the Chattahoochee and Coosa River basins of Georgia and Alabama and the Missouri River basin of North and South Dakota, Nebraska, Iowa, Kansas and Missouri have experienced serious water shortages. During the summer months, in particular, there has not been enough water in these river systems to satisfy all of the water demands. Water is needed for municipal and industrial use, irrigation, hydropower, and fish and wildlife enhance- ment as well as navigation. As a result, certain changes in the operation of Federal water projects have been proposed.

Downstream portions of the Chattahoochee, Coosa and Missouri Rivers are developed for navigation, and the Army Corps of Engineers is charged with maintaining year-round depths of nine feet. This is very difficult, of course, in times of drought or low water. The barge and towing industry has responded to the challenge by instituting light-loading, single-file and/or other emergency measures to keep waterborne commerce moving. The Corps of Engineers and the U.S. Coast Guard have cooperated in admirable fashion and succeeded in their missions, often against great odds.

Meanwhile, water demands in these three basins are intensifying, especially for recreation and water supply. If drought conditions should continue, management of river flows is going to require a superb balancing act. In the development of any future "water control plans," we are concerned that navigation not be slighted. In most instances, it was the inclusion of navigation benefits which made these river developments economically feasible for multiple public purposes. And navigation today generally affords a wide range of economic dividends which are vital both regionally and nationally. It remains a prime objective in the public interest.

The Federal role. The Water Resources Development Act of 1986 established a number of new cost-sharing and user-charge requirements for navigation, flood control and other water projects. For port and flood protection projects, non-Federal sponsors must sign "local cooperation agreements" or contracts, pledging their shares of project costs. For inland lock-and-dam projects, one-half of the construction cost comes from inland waterway fuel taxes. Fortunately, the Federal government seems to be giving priority to funding navigation and flood control projects which are cost-shared. The present arrangement is working, and it must be safeguarded in the future.

A new Federal/non-Federal financial partnership is now in place, and the non-Federal role is strictly enforced. The Federal government, in turn, must live up to its end of the 1986 cost-sharing agreement. For instance, a three-fold increase in the ad valorem tax on deep-draft waterborne commerce was recently proposed, just three years after the tax originally went into effect. Revenues go into the Harbor Maintenance Trust Fund and are used to fund up to 40 percent of the cost of maintaining deep-draft and some shallow-draft harbors. If the proposed increase is approved, it would "de-federalize" harbor maintenance so that it would no longer be a cost-shared program. If the cost of this program can be shifted entirely to non-Federal interests, we wonder if such a fate is also in store for other water resources programs. Federal government responsibilities must not be transferred to non-Federal interests.

In passing the landmark 1986 Act, Congress failed to give adequate consideration to the implementation of its cost-sharing requirement with respect to navigation projects on the Great Lakes -- projects which are located in one state but whose primary beneficiaries are located in other states, often far removed. Take, for instance, the deep-draft locks at Sault Ste. Marie, Michigan, linking Lake Superior and Lake Huron, through which huge volumes of iron ore, grain and other commodities must move on their way to distant destinations. Should an existing entity be designated as sponsor for this and/or other Great Lakes projects? Should a new entity (perhaps an interstate compact) be created for this purpose? Or, should initial cost-sharing requirements be waived and, instead, some type of innovative financing be developed for such projects? This is a problem requiring a prompt Congressional remedy.

The Federal government has a vital stake in navigation and other water resources projects. They contribute to American export expansion, national security, agricultural and industrial productivity, and overall national economic development. Water projects constitute a significant, yet often overlooked, portion of our beleaguered infrastructure. We appreciate your attention, Mr. Chairman, and that of your Subcommittee in addressing the Nation's water resources needs, and we wish you much success in passing a progressive, enlightened Water Resources Development Act of 1990.

National Waterways Conference, Inc.
1130 17th Street, Northwest
Washington, D.C. 20036

STATEMENT OF JOSEPH E. LEMA
VICE PRESIDENT FOR TRANSPORTATION
NATIONAL COAL ASSOCIATION
BEFORE THE SENATE SUBCOMMITTEE ON
WATER RESOURCES, TRANSPORTATION,
AND INFRASTRUCTURE, ON APRIL 19, 1990
WASHINGTON, D.C.

SUMMARY

Mr. Chairman and members of the subcommittee, my name is Joseph E. Lema. I am vice president for transportation of National Coal Association. NCA's member companies account for approximately 75 percent of the coal produced in the United States. Our members produce coal in eastern, midwestern, and western states, which then is transported to U.S. electric utility and industrial markets, and to other countries which purchase coal in world trade. U.S. coal relies heavily on efficient, competitive transportation services on the inland waterways system to reach domestic and international consumers. With that in mind, NCA warmly appreciates this opportunity to appear before the subcommittee with regard to S.2183, the Water Resources Development Act of 1990.

Specifically, NCA requests the subcommittee to consider incorporating four navigation improvement projects in construction authorizations presented in Title I of S.2183. These projects are:

- McAlpine Locks and Dam on the Ohio River in Indiana and Kentucky;
- Marmet Locks and Dam on the Kanawha River in West Virginia; and,
- two locks and dams to replace Locks and Dams 2, 3, and 4 on the Monongahela River in Pennsylvania.

Those facilities have been studied by the U.S. Army Corps of Engineers, which has determined that the McAlpine Locks and Dam, unless improved in capacity, will be a serious constraint to commercial barge traffic in this decade. The existing auxiliary lock chamber at McAlpine should be replaced with a 110-foot by 1,200-foot lock in order to handle effectively, tows consisting of a towboat and 15 modern barges which are in common use on the main stem of the Ohio River. In 1988 dollars, the Corps estimated the cost to be $200 million. The Marmet facility also requires increased capacity by replacing the auxiliary lock chamber with a 110-foot by 800-foot lock, a requirement that is especially timely inasmuch as the nearby Winfield Locks and Dam on the Kanawha River have construction underway pursuant to authorization in the 1986 Water Resources Development Act, and effective utilization of the Kanawha River for commercial navigation necessitates similar improvement at the Marmet Locks and Dam. The Corps estimates the cost, in 1988 dollars, at $150 million. The Monongahela River facilities are seriously deteriorated due to usage and the fact that, in the year 2000, they will be 93 years old. Age has taken its toll; a fact that I became highly familiar with in the mid-1980s, when a representative of a member company brought to Washington, D.C., a piece of concrete that had fallen into one of its barges while a tow was into a lockage maneuver. Locks and Dams 2, 3, and 4 would be replaced with two sets of higher capacity facilities, matching the new structures at Locks and Dams 7 and 8 on the Monongahela River which are under construction pursuant to their authorization also in the 1986 bill. In 1988 dollars, the Corps estimates that construction at these locations would total $395 million.

Mr. Chairman and members of the subcommittee, construction of this type often takes up to eight years for completion; therefore, it is desirable and appropriate to authorize these projects now so that they can proceed in a timely, orderly manner in this decade. Congestion is costly, adding to rates for electricity and consumer prices of items produced by energy intensive industries, and detracting from coal exports.

Certainly, the U.S. has a unique, valuable asset in our system of navigable inland waterways; an asset that benefits our economy by furnishing avenues for efficient bulk transportation, and our environment through accommodating fuel-efficient barge movements that do not disrupt the flow of surface traffic in communities located on the river banks in populous eastern, midwestern, and Gulf Coast regions. The projects for which we request construction authorizations in S.2183, added to those previously approved in the 1986 and 1988 legislation, are sound, warranted steps in the interest of preserving the effectiveness of the waterways for commercial traffic.

INLAND WATERWAYS TRAFFIC PROJECTIONS

The U.S. Army Corps of Engineers projects that inland waterways traffic will increase 0.7 to 2.1 percent annually through the 1990s. Further, the Corps projects that coal traffic will grow 1.9 to 3.2 percent annually in this decade. In our view that is reasonable, and perhaps conservative with regard to coal since it is possible that during the years ahead there will be more blending of coals from various coal producing regions to meet emissions targets. River terminals represent viable points, in many instances, for taking coal produced at several mines having differing characteristics such as heat value and sulphur content, blending the coals to specifications set by the utility, industrial, and export consumer, and delivering that coal product to plants in the U.S. and to Gulf Coast ports utilized to transship coal from inland points into coastal and world coal trade.

Already today it is estimated that inland waterways are used for originating 167 million tons of coal shipments: 134 million tons in the Ohio R. Basin; 7.9 million tons on the Lower Mississippi River and Gulf Intracoastal Waterway; 7.9 million tons on the Tennessee River; and 17.2 million tons on the Upper Mississippi River and Illinois Waterway above the Ohio River junction with the Mississippi River at Cairo, Illinois

The Ohio River Basin includes the main stem of the Ohio River and its Upper Ohio River Basin Tributaries, the Kanawha and Monongahela Rivers. Those volumes of coal traffic, joined by other commodities such as grain, chemicals, aggregates, petroleum products, and other minerals, now place extraordinary demands for lockages at a number of critical lock and dam facilities, particularly on the Ohio, Kanawha, Monongahela, Tennessee, Mississippi, and Warrior Rivers. From 1988 to 1989, and again from 1989 to 1990, according to NCA estimates, coal transportation demand increased 2.6 percent annually, indicative of why some river congestion is already being experienced. Clearly, that congestion and the losses associated with stalled towboats, barges, cargo, and crews, will become substantially more serious unless actions are initiated now to authorize selected capacity improvement projects.

Of particular significance is the Ohio River Basin's role as a high density barge corridor joining the Ohio River main stem with the Kanawha and Monongahela Rivers to the east and the Mississippi River System to the west, with linkages to other principal rivers like the Cumberland, Green, and Tennessee Rivers, as well as to the Tennessee-Tombigbee Waterway via the Ohio River junction with the Tennessee River. The river traffic at the projects requested by NCA is straining the capacity of their respective navigation systems: the main stem of the Ohio River on which the McAlpine Locks and Dam are located carries 192 million tons of cargo including 76 million tons of coal annually; the Kanawha River on which the Marmet Locks and Dam are located carries 16 million tons, including 12 million tons of coal; and the Monongahela River on which Locks and Dams 2, 3, and 4 are located carries 33 million tons, of which 24 million tons are coal. Obviously, locks on each of those river segments, which in every case are well below required levels of capacity, will be constructed in sizes commensurate with traffic demand and capability of navigation channels to handle varying size tows.

FINANCING INLAND WATERWAYS CONSTRUCTION PROJECTS

Mr. Chairman and members of the subcommittee, at this time of urgent need to move forward with a few selected waterways infrastructure improvement projects, we are indeed fortunate that the Congress, with leadership provided by this subcommittee, found in the Water Resources Development Act of 1986, an equitable cost sharing mechanism to finance construction of navigation projects. Commercial users of the inland waterways system are paying fuel taxes, set to increase from 11 cents to 20 cents per gallon in the first half of this decade, to be dedicated to funding 50 percent of waterways construction projects authorized by the Congress.

We believe that fuel tax revenues on deposit in the Inland Waterways Trust Fund established for such cost sharing mechanism, and interest realized from revenues deposited in the fund, together with the income to be secured from year-to-year collections of fuel taxes in the 1990s, will be adequate to allow the waterways projects which were authorized in 1986 and in 1988 to be completed plus those for which NCA now requests the consideration of this subcommittee in the process of reporting the Water Resources Development Act of 1990, S.2183.

In conclusion, recognizing the criticality of proceeding now with construction which takes up to eight years for completion, realizing that presently projected traffic demands justify the projects identified by NCA, and considering that the schedule of user charges in effect under present law is projected to provide adequate revenues for cost sharing of construction, NCA respectfully urges the subcommittee to incorporate the requested projects in Title I of S.2183.

Thank you for allowing NCA to appear at this hearing. I will be glad to respond to questions now, as well as in writing following the hearing.

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TESTIMONY OF
THE INTERSTATE CONFERENCE ON WATER POLICY

Before the
Subcommittee on Water Resources, Transportation, and Infrastructure
Senate Environment and Public Works Committee

Hearings on
1990 Water Resources Development Legislation

Presented by

James K. Coyne
Executive Director
Interstate Conference on Water Policy

April 19, 1990

Testimony of the
Interstate Conference on Water Policy
on
1990 Water Resources Development Legislation

The enactment of the Water Resources Development Acts of 1986 and 1988 has rejuvenated this nation's water resource development agenda and mandated new policy directions in many areas. In particular, cost-sharing reforms have given rise to a new partnership approach which has required adjustments in the way in which both federal and nonfederal interests approach water resource planning and project construction. It has also laid the foundation for a biennial schedule for water resources development legislation. ICWP is committed to working with both the Congress and the Corps of Engineers to maintain such a schedule, insuring that this country's water resource development program remains healthy and viable.

The Interstate Conference on Water Policy (ICWP) enthusiastically supported the passage of the 1986 Act and has worked closely with the Corps of Engineers as we jointly struggle with the challenges of our new partnership. As the independent national association of state, interstate, and regional water administrators, ICWP is committed to making the water resource policy reforms of the 1986 Act work. The experience of ICWP's members with implementing the new law over the past 3 years suggests that a few adjustments are necessary to enhance the reforms originally envisioned by Congress while preserving the framework of the partnership. ICWP has identified the following issues of concern and offers legislative language for inclusion in water resources development legislation this year:

Feasibility Study Cost-Sharing

Section 105(a)(1) of P.L. 99-662 specifies that the Secretary of the Army shall not initiate any feasibility study for a water resources project until nonfederal interests agree, by contract, to contribute 50 percent of the study cost during the period of the study. The Act further provides that not more than 50 percent of the nonfederal contribution can be made by the provision of services, materials, supplies, or other in-kind services. The limitation on the provision of in-kind services by nonfederal sponsors precludes the utilization of various services or data which may be necessary for the feasibility study. In many cases the nonfederal sponsor may be able to undertake components of the study more cost-effectively than the federal government. In such instances, the study process could be expedited or cost savings could be realized if the nonfederal sponsor is permitted to provide in-kind services in full satisfaction of the 50 percent nonfederal responsibility.

NOTE: Attachments to this statement have been retained in committee files.

In addition, the Corps of Engineers has interpreted Section 105(a)(1) to require that the in-kind services occur during the period of the feasibility study after the contract is signed. This precludes the use of work done by the nonfederal sponsor, which may be essential and necessary for the feasibility study, but which was conducted during the reconnaissance phase. Much of this work for which nonfederal sponsors cannot currently get credit could expedite the feasibility study if done during the reconnaissance phase.

A specific example is aerial photographic work. Many states have the capability to perform these services. However, aerial photography needs to take place during certain seasons in order to be accurate and interpretable. Having this work conducted during the reconnaissance phase so that it will be available during the feasibility phase will help expedite the feasibility phase. However, without a provision that it can be counted as part of the nonfederal in-kind service contribution, there is no incentive for the nonfederal sponsor to proceed with this or other similar work.

ICWP believes that Section 105 of P.L. 99-662 should be modified to allow a credit for in-kind contributions by nonfederal interests to the full extent of the nonfederal 50 percent contribution. In addition, credit should be allowed for nonfederal in-kind contributions during project reconnaissance studies. Specifically, the amount of any in-kind contribution for a reconnaissance study, as approved by the District Engineer, would be credited against the 50 percent nonfederal share of the cost of the feasibility study. ICWP suggests amending Section 105(a)(1) of P.L. 99-662 as follows:

> The Secretary shall not initiate any feasibility study for a water resources project after the date of enactment of this Act until appropriate non-Federal interests agree, by contract, to contribute 50 percent of the cost for such study ~~during the period of such study~~. ~~Not more than one-half of~~ Such non-Federal contribution may be made by the provision of services, materials, supplies, or other in-kind services necessary to prepare the feasibility report. The non-Federal contribution may include services, materials, supplies, or other in-kind services furnished during the reconnaissance phase if that contribution is approved by the District Engineer. Non-Federal interests shall receive credits for such contribution made during the reconnaissance phase only if the feasibility phase is subsequently undertaken by the Secretary.

Planning Starts

Section 905(b) of P.L. 99-662 requires that prior to initiating any feasibility study under Section 905(a) of the act, the Secretary shall first perform, at federal expense, a reconnaissance study. The purpose of the reconnaissance study is to identify potential solutions to water problems in sufficient detail to enable the Secretary to determine if project planning should proceed to the feasibility study phase.

There may be instances wherein critical water resources problems arise, in which cases it would be desirable if the Secretary had the authority to reprogram available General Investigations funds, without prior Congressional approval, in order to initiate reconnaissance studies for such problems.

The present process for a new planning start is to have the study authorized by Congress through either full Congressional action or through a committee resolution. Under the present system, it takes approximately 18 months after a request for a study is received before the actual study work can proceed. This is true even if there is money that can be reprogrammed into the study and the study is a priority. The process requires (1) that the study be included in the President's budget as submitted to Congress and then (2) that it be included as a new study start in the Energy and Water Appropriations bill.

As a result of the reforms in P.L. 99-662, many steps are being made to reduce the historic time from study initiation to construction completion. These reforms were much needed, however, additional effort is necessary to provide for a more expedited process for new planning starts.

The study process could be significantly expedited if the Corps is authorized to reprogram funds for new study starts in critical problem areas such as those where a federal disaster has been recently declared. ICWP offers the following legislative language as an amendment to Section 905 of P.L. 99-662 to accomplish this needed reform:

> The Secretary is hereby authorized to reprogram available General Investigations funds to initiate reconnaissance studies of critical water resources problems at his discretion without prior Congressional approval if the following conditions exist:
>
> (a) The problem is of such a nature that it would be unwise to delay the reconnaissance study to await funding through the normal appropriations process.
>
> (b) A Congressional authority already exists under which the reconnaissance study can be completed.

(c) Prior to authorizing a reprogramming action, the Secretary notifies the House and Senate Appropriations Committees of his intention.

The Secretary's reprogramming authority is limited to $500,000 for any reconnaissance study. If additional funds are required to complete the reconnaissance study they will need to be provided through the normal process in subsequent fiscal years.

Planning and Engineering

Section 105(b) of P.L. 99-662 requires that non-federal interests contribute 50 percent of the cost of the planning and engineering authorized by that Act. It seems clear that this provision was intended to apply to projects such as those in Section 401(c) of P.L. 99-662 which were authorized in 1986 for preconstruction planning, engineering, and design only because those projects had no completed Corps of Engineers' feasibility report. Sections 105(a) and (c) lay out the normal cost-sharing provisions whereby non-federal interests contribute 50 percent of the cost of feasibility studies and share in the design costs in the same percentage as the purpose of the project.

Unfortunately, Section 105(b) has the potential for being misinterpreted. It is ICWP's view that non-federal sponsors should be required to contribute 50 percent of the costs of planning and engineering only when such a project did not follow the typical planning scenario whereby the nonfederal interests would have been required to contribute 50 percent of the costs of the feasibility study if it had been undertaken. To clarify what ICWP views as the original intent of Section 105(b) it is recommended that the following language be added as an amendment to Section 105(b) of P.L. 99-662:

> "The Secretary shall not initiate any planning or engineering authorized by this Act for a water resources project until appropriate non-Federal interests agree, by contract, to contribute 50 percent of the cost of the planning and engineering during the period of the planning and engineering. This subsection shall not apply to planning and engineering of projects for which the non-Federal interests contributed 50 percent of the cost of the feasibility study."

Single Owner Policy

In 1936 Congress established a nationwide policy of flood control on navigable waters or their tributaries and determined that it was in the interest of the general public for the federal government through the Corps of Engineers to participate in flood control activities on these waters. The Flood Control Act of 1936 states that there is a federal interest in improvements "for flood-control purposes if the benefits to whomsoever they may accrue are in excess of estimated costs, and if the lives and social security of people are otherwise adversely affected."

The Water Resources Development Act of 1986 did not change the federal interest but did redefine cost sharing of flood control and other water resource projects. This new cost sharing significantly increased the non-federal cost and states and local governments were to become "partners" in the water resource development process from the initiation of planning through the completion of construction.

The Corps of Engineers has recently promulgated a regulation (ER 1165-2-123) which significantly changes the balance of federal versus non-federal interest in flood control and other projects. These changes modify when there is, in the view of the Corps of Engineers, a federal interest in proposed water resource projects. This revised regulation would prohibit the Corps of Engineers from participating in flood control projects where there is a single owner who benefits such as public wastewater treatment plants, public and private schools, public and private colleges, and public highways. This interpretation of where there is a federal interest in flood control and other water resource projects is not consistent with our understanding of the Water Resource Development Act of 1986 or the historical role of the Corps of Engineers in water resource projects.

This new interpretation of federal interest is also inconsistent with the Disaster Relief and Emergency Assistance amendments of 1988 (P.L. 100-707). In the case of a Presidential disaster declaration, federal assistance is available for emergency protective measures to save lives, to protect public health and safety, to protect improved property, and to restore eligible facilities after a disaster.

Eligible facilities include public facilities owned by state or local government including public power, sewage treatment and collection, water supply and distribution, airports, any non-federally subsidized state road or highway, and other public buildings, structures or systems including those for educational, recreational or cultural purposes. Eligibility also extends to certain private, non-profit facilities including educational, utility, emergency medical or custodial care facilities, and similar facilities.

We have one federal agency, the Corps of Engineers, providing new interpretations of when there is a federal interest in protection of publicly owned property at the same time another agency, the Federal Emergency Management Agency, is issuing rules implementing P.L. 100-707 which say there is a federal interest in protecting the same type of facilities which the Corps of Engineers now excludes.

ICWP believes that property ownership should not be a test of whether a federal interest exists in the protection of that property against flood or erosion damages. Publicly-owned properties such as public power, sewage treatment and collection, water supply and distribution facilities, airports, roads and highways, or other public structures or systems should be eligible for protection irrespective of the number of entities involved in ownership. The following language is offered as a means of clarifying the federal interest:

Option 1

Amend Section 1 of the Flood Control Act of 1936 (33 USC 701a.) as follows—

> "It is hereby recognized that destructive floods upon the rivers of the United States, upsetting orderly processes and causing loss of life and property, including the erosion of lands, and impairing and obstructing navigation, highways, railroads, and other channels of commerce between the States, constitute a menace to national welfare; that it is the sense of Congress that flood control on navigable waters or their tributaries is a proper activity of the Federal Government in cooperation with States, their political subdivisions, and localities thereof; that investigations and improvements of rivers and other waterways, including watersheds thereof, for flood-control purposes are in the interest of the general welfare; that the Federal Government should improve or participate in the improvement of navigable waters or their tributaries, including watersheds thereof, for flood-control purposes if the benefits to whomsoever they may accrue are in excess of the estimated costs, and if the lives and social security of people are otherwise adversely affected." This includes the investigation, planning, design and construction of flood control works to prevent damage to highways, bridge approaches, and public works, churches, hospitals, schools and other non-profit public services. Protection of these or other facilities shall not be precluded because the ownership of the property to be protected resides in a single public or private non-profit entity.

Option 2

Include the following legislative language in the 1990 Water Resources Development Act:

> "In determining the Federal interest in potential flood damage reduction and shoreline protection projects, the Secretary shall apply existing Federal flood damage reduction and shoreline protection laws and authorities to preventing flooding and erosion damages to endangered public works, public parks, and non-profit private facilities which serve the general public without regard to the number of entities which own or operate the properties to be protected. The Secretary is directed to use recreation benefits to justify shore and hurricane protection projects and as a basis for determining and recommending federal interest in such projects.'

Cost-Sharing for Section 22 and Flood Plain Management Services

The Administration, in its FY 1991 budget, has again proposed cost-sharing of planning assistance to States (Section 22) and flood plain management services. Beginning in FY 1991, these services, which have traditionally been provided at 100 percent federal cost, will require non-federal matches on a graduated scale beginning at 10 percent and increasing to 50 percent by FY 1993.

ICWP is concerned about this proposal for a variety of reasons. Throughout its history, the Section 22 planning assistance program has yielded a wide variety of products that have been invaluable in supplementing the water resources management capability of the states.

To a large degree, many of these efforts are already being conducted on a partnership basis. State and/or local resources are frequently devoted to these studies or data acquisition efforts by providing in-kind services including staff support. In this way, Section 22 studies are not only already cost-shared, but they provide flexibility to respond to special needs. Requiring cost-sharing in the form of cash matches may very well destroy the utility of the program.

Congress recognized the value of the Section 22 planning assistance program when the authorized funding level for the program was raised from $4 million to $6 million in the Water Resources Development Act of 1986. The cost-sharing reforms of that Act were not applied to the Section 22 program. ICWP believes this was done for good reason and that cost-sharing principles should not now be extended to include Corps of Engineers technical services. Cost-sharing requires significant advance cooperative planning and scheduling of state fiscal resources. Requiring cost-sharing of Section 22 studies may thus eliminate the flexibility that is fundamental to this program. In the past, Section 22 authority has been used to respond to various emergency situations and special needs. These efforts can be and often are of a collaborative nature. However, cash match funding is simply inappropriate for these programs.

In 1989 ICWP conducted a survey to assess states' use of federal funds for Section 22 studies and flood plain management services (please see the attached report, entitled **1989 Interstate Conference on Water Policy Survey on Section 22 Studies and Flood Plain Management Services**). The survey also queried states on their ability to cost-share these services on a 50 percent match basis. Over half the states responded to the survey. Of the seven responding states that reported they cost-share Section 22 studies, all seven reported that they make up part of their contribution with in-kind services, while only one state indicated that it provides a cash match. All 26 of the responding states were opposed to the proposed non-federal cost-sharing for both Section 22 studies and flood plain management services. Furthermore, results of the survey indicated that only one quarter of the states would have the proposed non-federal share available in their FY 1991 budgets if cost-sharing were enacted for these programs.

ICWP's survey also showed that most states utilize Section 22 planning assistance for reconnaissance level type studies. As provided in Section 905(b) of the Water Resources Development Act of 1986, reconnaissance level studies do not require nonfederal cost-sharing, but are conducted at full federal expense.

ICWP urges Congress to reject, as it has before, proposals to extend cost-sharing to the planning assistance and flood plain management services programs.

Testimony
of
Daniel E. Sagramoso, Vice President
National Association Of Flood And Stormwater
Management Agencies
and
Chief Engineer And General Manager
Flood Control District Of Maricopa County, AZ

before the Subcommittee On
Water Resources, Transportation And Infrastructure
Senate Environment And Public Works Committee

April 19, 1990
Washington, D.C.

Mr. Chairman, members of the Subcommittee, I am Daniel Sagramoso, Vice President of the National Association of Flood and Stormwater Management Agencies (NAFSMA) and Chief Engineer and General Manager of the Flood Control District of Maricopa County, Arizona. Before joining the Flood Control District, I served for over 20 years as an active duty uniformed member of the U.S. Army Corps of Engineers, service which included three years in South Carolina as Deputy District Engineer for the Charleston District.

NAFSMA represents state and local public agencies nationwide with service population areas ranging from 76,000 to more than 10 million. Many of our members are currently involved with ongoing water resource projects with the Corps of Engineers. As an organization, and as individual agencies, NAFSMA represents a large group of the original players in the federal partnership effort which is needed to make the 1986 and 1988 Water Resources Development Acts work. I would like to commend the Subcommittee for its efforts to keep the Water Resources Act on a two-year reauthorization cycle. As current and potential local sponsors, our members are well aware of the need to continue the current cycle, which began with the enactment of the Water Resources Development Act (P.L. 99-662) in 1986.

I would also like to underscore the commitment of NAFSMA and its members to the basic tenets of the acts – partnership and cost-sharing. To demonstrate our commitment, NAFSMA, jointly with the U.S. Army Corps of Engineers, sponsored a workshop in Paradise Valley, Arizona on December 6-8, 1989 to identify key areas where the partnership needs refining.

By bringing together local sponsors and many of the Corps life cycle project managers from across the country for this in-depth review, which focused on regional and national issues, the key individuals charged with making the new partnering effort a success were able to surface a number of what we feel are viable recommendations for improving the current project management process.

I am pleased to provide the Subcommittee with a full pre-publication copy of the study, which sets forth a detailed review and summary of our workshop, the theme of which was "*Making the Water Resources Development Acts of 1986 and 1988 Work: Strengthening the Federal/Local Partnership.*"

Included in the workshop recommendations were three that the Corps of Engineers has already moved to address and they deserve commendation for this immediate response. Included in a recently released draft Local Sponsors' Information Kit are documents designed to clarify sponsor's rights and responsibilities, to identify the negotiable from the non-negotiable issues in an Local Cooperation Agreement (LCA) and finally, to serve as a guide to Corps reference materials. These were among some of the specific items identified as needed at the Arizona workshop.

Our joint workshop in December and the Local Sponsor Kit are clear examples of the Corps' efforts to improve the partnership. We expect similar efforts in the coming months. However, as evidenced by your legislation and District and Division Corps representatives participating at the Arizona workshop, the system is still in definite need of fine-tuning. Although some of that refining can be accomplished by changes in internal Corps policy, other issues, such as those which we will discuss today, will require legislative direction.

Let me review some of the overriding themes and agreements which resulted from the workshop:

- There is consensus that the new partnership between the Corps of Engineers and local sponsors is moving forward.
  - *There is a clear need for additional education and reformulation of Corps management practices to provide for increased involvement of local sponsors in all phases of the process.*
  - *Despite some progress, there is a continuing need for better coordination and understanding among the various levels of the Corps of Engineers.*

- Cost-sharing is now accepted as an operating principle; the relationships reflecting this shared financing are still evolving.
  - *Statutes can change faster than most institutions and delivery systems.*

- There is a new sense of cooperation and joint problem-solving that should help ensure better projects in the future and now brings more parties, expertise and commitment to federally-sponsored projects.
  - *Local expectations, as well as local dollars, are forcing changes and review of Corps procedures.*

- *Local sponsors bring a broader context to the planning and design of projects and their expertise should be included in Corps planning.*

Mr. Chairman, I will now review a number of issues currently before this Subcommittee concerning the reauthorization of the Water Resources Development Acts.

S. 2183

Within S. 2183, NAFSMA supports sections 302, which would require rules or regulatory changes in eligibility criteria for Corps civil works projects to be submitted to Congress and prevents the use of such changes in determining the eligibility of projects for which the reconnaissance study has been issued prior to the issuance of such a rule or regulation, and 303, which would require two-year reporting by the Corps to Congress on the district and divisional conduct of the Civil Works program and performance of its key commanders.

NAFSMA also supports Section 304 and the goal of Section 305. The association is concerned, however, that the proposed language of the latter section could lead to denials of federal assistance for projects where less than 100-year level of protection is economically justified and meets local needs. NAFSMA recommends that during consideration of Section 305, language be included stating that "while the 100-year level of protection is a desirable objective, federal assistance should not be denied to economically justified projects where that level of protection is not required by local conditions."

The Administration's Proposal

Within the administration's draft proposal recently transmitted to Congress, NAFSMA has some minor concerns. Although the association supports the concept of cost sharing, as enacted in the 1986 and 1988 Water Resource Development Acts for water resource projects, NAFSMA is concerned about expanding this concept to apply to Corps flood plain management services, as specified in the administration's draft proposal. Our fear is that the administrative costs associated with such a proposal, in both time and financial resources at the federal and non-federal levels, would outweigh the benefits that could be seen by the Corps in such a move.

Also of potential concern are the administration's proposals on project interest and discount rates and the expansion of the Corps emergency and disaster authority.

With the latter provision, NAFSMA is particularly concerned that by broadening the definition of the the Corps authority for river and harbor projects to include preparations "for emergency response to any natural disaster," needed financial and physical resources could be diverted away from vital flood control efforts that the Corps was given the authority to protect.

In addition to the proposed legislative provisions that are currently before you, NAFSMA asks that the following proposals or issues also be considered.

Advance The Signing of LCAs

During discussions at the Corps/NAFSMA Arizona meeting, it became clear that earlier signing of the Local Cooperation Agreement (LCA) is needed. NAFSMA supports the inclusion of language in the 1990 Reauthorization Act which directs the Corps to execute LCAs before the final year of preconstruction engineering and design rather than waiting until Congress appropriates construction funds for new start projects.

Current policy is that LCAs will not even be transmitted to ASA (Civil Works) for review until a General Design Memorandum (GDM) or other design document is approved, project is budgeted as a new start, financing plan is secured and NEPA requirements are met. The actual execution of the LCA takes place only after funds for construction have been appropriated by Congress.

The problem with current policy is that local sponsors must work far in advance of a signed LCA to provide required lands, easements, rights of way, relocations and disposal (LERRD), with no assurance of an eventual go-ahead for the project, as well as no assurance of subsequent credit or reimbursement. NAFSMA recommends as a solution to have the signing of an LCA after approval of a feasibility report, or certainly before the final year of preconstruction engineering and design and approval of of the GDM.

Also included among the recommendations to improve the LCA process, which were developed in Arizona, were increased delegation of authority to the Districts in LCA process, including execution of the LCA by the District or Division Engineer; a streamlining of the review process; a requirement for sponsor review of changes; and the establishment of a local sponsor appeals process.

Hazardous and Toxic Waste Language

Another issue that merits close attention, either through congressional or court review, is new hazardous and toxic waste cleanup language recently included by the Corps as part of the local cooperation agreements. While we recognize the Corps' continuing efforts to refine the language to address local sponsor concerns, NAFSMA remains concerned about how these requirements were initially imposed on local sponsors, without the benefit of public review and/or legislative direction. We believe sponsors should have an opportunity for review and comment on proposed changes such as the hazardous waste language, which are to be made mandatory requirements for signing of an LCA. Unilateral imposition of new LCA requirements is not consistent with the spirit of partnership and cooperation needed to make the Water Resources Development Acts work.

NAFSMA is also concerned that with the past and potential future evolution of the current hazardous and toxic waste language, local sponsors at various points could be forced to operate under different sets of legal cleanup responsibilities.

Section 902 - Maximum Cost of Projects

It has been noted that the 20 percent limit for cost increases from the level of authorized total project cost, which was imposed by Congress under P.L. 99-662, has had the unintended effect of penalizing those sponsors whose project costs are based on factors outside the scope of the construction of the plan, such as land costs, since they must then wait for the next authorization cycle to reauthorize the project, if the project exceeds the 20 percent limit. NAFSMA recommends that language be included in the 1990 reauthorization act to provide additional flexibility in the limits for the maximum cost of a plan to allow for increases in outside factors.

Section 215 - Reimbursement Limitation Per Project

Participants at the Arizona workshop raised the concern that in many cases the existing limits for advance construction of an authorized project under Section 215 (currently $3 million or one percent of the total project cost) of the Flood Control Act of 1968, do not allow local sponsors the flexibility needed to move forward and meet local needs in a timely manner. As the sponsor is totally at risk in advancing a portion of an authorized plan, they should have the ability to advance a meaningful segment of the project, especially in light of current construction costs. NAFSMA requests that Congress increase the Section 215 limit to allow sponsors to meet local conditions.

In addition, there are several other areas which NAFSMA members and other local sponsors identified at the Arizona session as being in need of fine-tuning to produce a true partnership with the Corps of Engineers, especially in the project management scheme. Included among the recommendations were increased sponsor involvement in the development of project management plans, regular and scheduled input to Corps monthly reports, and sponsor attendance at Design Project Review sessions.

Cost Sharing on Correction of Design, Engineering or Construction

Noted as a concern by the participants at the Arizona workshop was cost-sharing on correction of design, engineering or construction. Prior to the 1986 Water Resources Development Act, the Corps paid 100 percent of such corrective work. NAFSMA recommends inclusion of a legislative provision that directs that cost-sharing requirements that were in effect at the time of a project's actual construction be applied to any future projects developed to correct design, engineering or construction deficiencies.

Federal Infrastructure Council

NAFSMA would support the establishment of a Federal Infrastructure Council. As noted in a report recently released by the Office of Technology Assessment, "the need to replace and improve public works has been well documented in more than a dozen national studies since 1980." Included among those cited by OTA as support is the report prepared by the National Council on Public Work Improvement in 1988, which estimates that annual future infrastructure investment needs could require double the $45 billion invested in 1985. The recent declines in federal public works funding, combined with growing environmental requirements, create a need for some type of national focus to be given to our country's infrastructure needs. The water resource needs for the state of New York alone, estimated to exceed $20 billion for water and sewer infrastructure, serve as evidence of our need to look at these critical issues from a national perspective.

As an association that represents the interests of flood control and stormwater management agencies nationwide, NAFSMA would welcome the opportunity to play a role in such an effort.

In closing, I greatly appreciate the opportunity to testify before the Subcommittee on behalf of the association and would welcome any questions that you may have.

STATEMENT OF RONALD R. BESSON

PRESIDENT, WEST JEFFERSON LEVEE DISTRICT

AND

MEMBER, EXECUTIVE COMMITTEE
LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION

TO THE

SENATE SUB-COMMITTEE ON WATER RESOURCES,
TRANSPORTATION AND INFRASTRUCTURE

ON BEHALF OF CHANGES

TO THE

ABILITY-TO-PAY CRITERIA

FOR

FLOOD CONTROL PROJECTS

STATEMENT

BY

MR. RONALD BESSON

LOWER MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION

Mr. Chairman and distinguished Members of the Committee, my name is Ronald R. Besson. I am the President of the West Jefferson Levee District with headquarters in Marrero, Louisiana. I am also a member of the Executive Committee of the Lower Mississippi Valley Flood Control Association and I appear here as Spokesman for that Association to present our concerns with the criteria being used to implement the ability of a non-Federal interest to pay for cost sharing for flood control work as specified in the Water Resources Development Act of 1986.

The Lower Mississippi Valley Flood Control Association was first organized in 1922. Our 130 member organizations include levee boards, drainage districts, port authorities, harbor commissions, state agencies, municipalities and also just individuals that share our problems and concerns. Those problems address themself to flood control, navigation, channel improvements and major drainage in the seven states of the alluvial valley of the Lower Mississippi River and I think more importantly our concerns are for the welfare and prosperity of this great nation of ours.

Our Association is comprised of a very large group of individuals who are businessmen, property owners, conservationists, farmers, attorneys, doctors, wildlife enthusiasts, engineers, accountants, environmentalists, civil servants and elected officials from all political parties.

Our Objectives simply stated are:

To seek Congressional authorization for, and adequate annual appropriations for the early completion of all flood control projects necessary for the protection of the Lower Mississippi Valley against the maximum probable flood.

To secure prompt initiation of, and early completion of existing project for the stabilization of the banks of the Lower Mississippi River in order to assure the integrity of the Main River Levee System; to provide increased flood discharge capacity, permanency of location for harbor facilities and industrial sites, and to obtain deeper and more reliable navigation channels.

To support channel and major drainage improvements throughout the Lower Mississippi Valley to provide protection against headwater flooding, and to provide adequate outlets for local and state drainage projects.

To cooperate in every proper way with the Department of the Army, the Chief of Engineers of the United States Army, the Mississippi River Commission and other agencies to hasten the accomplishment of flood control in the Mississippi Valley.

Mr. Chairman, during the long and arduous discussions that preceeded passage of the Water Resources Development Act of 1986, the Lower Mississippi Valley Flood Control Association took the firm and vocal position that any new and additional cost-sharing for the remaining work necessary to complete the flood control portion of the Mississippi River and Tributaries Project would be unrealistic since the Mississippi River and Tributaries Project was and is a single, multi-state project that was conceived by the Congress to protect the people in the Lower Mississippi Valley from devastating floods coming down on them from over 40% of the land area of the United States, from as far east as New York and as far west as Montana.

Needless to say we lost our fight concerning new and additional cost-sharing and we have accepted that fact. We were and are now still hopeful that this cost-sharing can be considered in such a manner as to make certain that beneficial projects will not be rejected simply because non-Federal interests lack the dollars necessary to finance their share. Mr. Chairman, that is what I wish to discuss today.

As this Committee knows there was considerable concern expressed by numerous members of the Congress about the ability of non-Federal interests in low income areas or with limited resources to meet the increased cost sharing requirements. As a result of that concern, section 103(m) established a requirement that any cost sharing agreement consider the ability of any non-Federal interest to pay the local share for flood control or agricultural water supply projects. Section 103 reads as follows:

"Any cost sharing agreement under this section for flood control or agricultural water supply shall be subject to the ability of a non-Federal interest to pay. The ability of any non-Federal interest to pay shall be determined by the Secretary in accordance with procedures established by the Secretary."

I shall not take the time to quote even the Senators that expressed their concern about the ability of small communities and economically depressed areas to provide the cost-sharing required by Public Law 99-662 but I would like to quote the distinguished Chairman of this Subcommittee in his response to Senator Bumpers from Arkansas. Senator Moynihan is quoted as saying: "Beneficial projects should not, however, be rejected simply because non-Federal interests lack the resources to finance the share of the developing costs."

Senator Moynihan also responded to Senator Bumpers that this Committee would oversee and put its final approval on the procedures established by the Secretary of the Army to determine the ability of any non-Federal sponsor to pay.

Unfortunately, Mr. Chairman, the Executive Department is still operating under the false assumption that even the poorest communities and states can afford at least 25% of the cost of all economically justified flood control projects. Mr. Chairman, we are here today representing those poorest communities and states and we think no better proof of the fallacy of that assumption is needed than the fact that almost three and one-half years after the passage of the Water Resources Development Act of 1986 not one single local cooperation agreement for a flood control project in the Mississippi River and Tributaries area has been signed. This in spite of the great need for flood control work in the Lower Mississippi Valley.

This Association has accepted the concept of cost-sharing and the local people have for many, many years met their requirements and done their share. We cannot agree with the Executive Department's criteria for the ability to pay and we do not believe it meets the full intent of the Congress.

Procedures to determine local cost share requirements for flood control projects under the ability to pay provision have been developed and published.

The local cost sharing requirements under the ability to pay provision established by the Secretary is a two step process. In the first step the process takes into account the benefit to cost ratio of a project as a measure of a local interest's ability to pay, and the second step takes into account the per capita personal income of the county or counties in which the project is located, as well as the state or states in which the project is located.

It is the first step that we totally disagree with. In the first step the benefit to cost ratio for the flood control features of a project is divided by four and expressed as a percentage. It is assumed that the local sponsor can afford at least that percentage of the project cost. If the percentage derived by taking 25% (1/4) of the benefit to cost ratio is less than the percentage of project cost than would be normally required under the cost sharing provisions of the Act, the local sponsor may be eligible for a reduction from the normal share, depending on the results of the second step. If 25% of the benefit to cost ratio is higher than the percentage of project cost which would normally be required by the cost sharing provisions of the Act, the local sponsor will not benefit from the ability to pay provision. He would in that case pay the normal percentage.

If the benefit to cost ratio of a project is 2 or greater there would be no reduction in local cost sharing as a result of the ability to pay provision since 1/4 of 2 expressed as a percentage is 50%, which is equivalent to the maximum local cost requirement required without ability to pay.

In very few instances will the ability to pay provision result in local interests paying less than the normal minimum 25% of project cost since 1/4 of the benefit to cost ratio of 1 equals 25% expressed as a percentage. Only if a project has a benefit to cost ratio of less than 1 would the local cost share be less than 25%. A project with a benefit to cost ratio less than 1 is very seldom if ever implemented.

I mentioned that we disagree with the concept of using the computed benefits of a project to determine a sponsor's ability to pay. Let me list just three:

(1) Benefit to cost ratio development is subject to bureaucratic modification and/or administrative changes that are completely unrelated to a local entity's ability to cost share.

(2) Flood control benefits represent prevention of economic losses, but do not produce cash flow which can be used to meet financial costs.

(3) Benefits currently utilized in benefit to cost ratio analyses are by definition "national economic development" benefits, and do not

represent measurement of direct financial improvement available to the local sponsor, i.e. improved tax base, etc.

Let me also say that during discussions the conference committee stated that, "the ability to pay is to be applicable to all projects with flood control and agricultural water supply benefits regardless of the project's overall benefit to cost ratio."

The second step of the Secretary's criteria takes into account the economic condition of the community and the state in which the project is located. The formula developed by the Secretary uses per capita personal income as the measure of economic conditions to be used in determining ability to pay. Use of per capita income reflects two of the three factors set out in the report of the Senate Committee on Environment and Public Works in 1985. Those two factors are: (1) income in relation to need; and (2) unemployment. It appears to us that these factors reflect the local areas' ability-to-pay for flood control works or any other requirement placed on the people.

Unfornately the Secretary's criteria only uses this second step to determine what he terms an "eligibility factor" that is computed to determine whether a project is eligible to be considered in step one that deals with computed benefits rather than the economic condition of the community.

Under the Secretary's criteria, if a project shows "eligibility" then step one will place the cost-sharing requirements between the minimum of 25% or the maximum of 50% as stated in the Law. We see no purpose of the ability-to-pay section if in fact all economically justified projects will fall within the percentage established by the Law.

Mr. Chairman, we are not alone in our concern with the Secretary's criteria on ability-to-pay. I would like to sight as just two examples the feelings expressed by two Congressionally mandated commissions. First the Mississippi River Commission, established by law in 1879, voted unanimously last year to request that the Secretary of the Army review his criteria to determine whether or not the regulation should be modified to provide more realistic opportunities for economically depressed communities and states to participate in flood control projects. Their entire resolution is attached to this statement.

Second, the Lower Mississippi Delta Development Commission, established by law in 1988, has stated that a likely proposal for their ten-year strategic plan to improve the Delta's economic situation is the "easing of the three-year-old Federal law that required communities to provide one-fourth of the cost of new flood control projects to earn Federal funds." A copy of the newspaper article that contains this quote is attached.

Mr. Chairman, we all understand that only the wording in the Act can be taken as a matter of law. The conference reports and comments of individual members of the House of Representatives and Senate may provide some understanding of the attitudes and opinions concerning the ability to pay provision, but the wording of the Law makes it clear that final determinations on ability to pay are to be made by the Secretary of the Army. For that reason we request that this Committee place wording in the 1990 Water Resources Act that would direct that the determination of the ability-to-pay the non-Federal portion of flood control projects be based on the economic condition of the community.

We believe that the formula used in step two of the Secretary's criteria is a reasonable and prudent way to determine the percentage required and we recommend its use with credence given to benefits only to determine the economic justification of a project. They would not enter into the ability to pay computations.

The procedure we would recommend retains the state and area factors which are a part of the Secretary's procedure and therefore assumes that the state has equal responsibilty and ability to pay for a project as does the county or counties in which a project is located. The constants in the formula also remain in effect and therefore only about 20% of the counties in the United States would pay less than approximately 80% of their normal share and about 2/3 of the counties in the United States would be required to pay 100% of the normal share.

In other words the very poorest counties and states would benefit and we feel that was certainly the intent of the Congress.

Under our recommended procedure the ability to pay findings would not be used to provide relief from the requirement that local interests pay five percent of the project in cash during project construction. It is our understanding that Congress wanted to retain the cash requirement as an indicator that the non-Federal interests had a serious commitment to the project and we would respect that.

In closing, I would like to emphasize our belief that water resources projects with proven merit are not a drain on the Federal Budget, but are investments which have already, or will, return to the taxpayer a generous return. The Mississippi River and Tributaries Project alone more than paid for itself in reduced monetary losses in only one flood, not to mention the reduction in human suffering. We believe that not to construct such proven projects will contribute to the economic problems of our country--not help solve them. The economics related to water transportation and the importance of flood protection for our agricultural and industrial interests in this nation are of extreme importance. It is our sincere belief that to complete the Mississippi River and Tributaries Project as quickly as possible to avoid the increased costs that are likely to occur through inflation and to protect the Federal and local funds already invested in the project is sound economics. Completion of this project would allow the full development of the agricultural and industrial potential of the lower valley. Such development will add to the job market, increase the gross national product of this great country and improve the health and well being of the citizens of the valley, the poorest area of this country. These are the real and tangible long term benefits which will be the direct result of project completion. But they cannot be reached nor realized under the present ability-to-pay criteria. We urge this Committee to take the necessary steps to change that criteria.

Mr. Chairman, we thank you for this opportunity.

RESOLUTION ADOPTED BY MISSISSIPPI RIVER COMMISSION ON ABILITY-TO-PAY

ABILITY TO PAY

The Commission recognizes that, in today's world, cost sharing is a fact; however, the Commission believes that the regulatory implementation of the ability-to-pay provisions of the 1986 Water Resources Development Act should be reviewed. Many of the states and local government entities in the Lower Mississippi Valley are in precarious fiscal situations and lack the ability to provide the minimum amounts required by the implementing regulation (33 CFR Part 241).

During recent public meetings of the Commission, as well as during the discussions that have accompanied the Commission's inspections of the Lower Mississippi Valley, local interests have spoken frequently of the problems they are encountering with the regulatory implementation of the "ability to pay" clause of the 1986 Act. Although they understand and appreciate the need for project beneficiaries to assist in the funding of Federal construction that will serve their interests, they are concerned that the fiscal demands currently placed on them are tantamount to barring participation in these critically needed programs.

The Commission, after reviewing the current status of Local Cooperation Agreements (LCA) for currently authorized projects and noting the large number of these LCA's which remain unsigned or which potentially will go unsigned because of inability of the local sponsors to provide their share of the costs, expresses its concern that the twenty five percent minimum contribution established by 33 CFR Part 241 is not a realistic floor.

The Commission further concludes that the designation of a twenty five percent minimum is not in accord with the full intent of the Congress, as expressed in comments by Members prior to passage of the Act and in the conference report on the Act. These comments indicate Congressional intent that beneficial projects should not be rejected because non-federal interests lacked the resources to finance their share of the development and that cost sharing requirements could be modified on a case-by-case basis to accommodate poorer communities.

The Commission believes that, given the above experience in the Lower Mississippi Valley, the Secretary of the Army should consider a review of 33 CFR Part 241 to determine whether or not this regulation should be modified to provide more realistic opportunities for economically depressed communities and states to participate in flood control projects.

BOARD OF COMMISSIONERS
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April 11, 1990

BOSSIER LEVEE DISTRICT

The Levee District in conjunction with the DOTD and Soil Conservation Service are preparing plans and specifications for the next phase of the Flat River Project. This is a continuation of Cypress Black Bayou Watershed Project which began in the 1970's. When completed the project will help relieve the flooding to residents in Bossier Parish. The cost estimate on the next phase is approximately $1,824,000.

During the last two phases of the Flat River and Benoit Bayou Project, the banks caved and the Coy Road Bridge had to be replaced. As a result of these damages lawsuits totaling $7,200,000 have been filed by the property owners against the Levee District.

TESTIMONY OF JOSEPH H. ELY
CHAIRMAN OF THE
PYRAMID LAKE PAIUTE TRIBE OF INDIANS
ON S. 2183
BEFORE THE
SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION AND INFRASTRUCTURE
OF THE
SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

April 19, 1990

Mr. Chairman, distinguished members of the Committee, I am honored to testify before you today on a matter of great importance to my Tribe, restoring the environmental quality of our Reservation. My name is Joe Ely, I'm the Tribal Chairman for the Pyramid Lake Paiute Tribe.

I am here to testify in support of Section 203 of S. 2183. Section 203 would authorize and direct the Secretary of the Army, in consultation with the Pyramid Lake Paiute Tribe and the Secretary of the Interior, to undertake two environmental enhancement projects on the Pyramid Lake Indian Reservation. Both projects would significantly aid Pyramid Lake's two principle fish, the endangered cui-ui, which is found only in the Pyramid Lake/Truckee River ecosystem, and the threatened Lahontan cutthroat trout, which once attracted trophy trout anglers from all over the world to Pyramid Lake and grew there to world record size of 41 pounds. In so doing, both projects would carry out the objectives of the Endangered Species Act and fulfill the federal government's trust responsibility to the Pyramid Lake Paiute Tribe to preserve and protect the Pyramid Lake fishery.

The need for both projects arises out of the federal government's treatment of my Tribe's most cherished and valuable assets, Pyramid Lake, the lower Truckee River and the Pyramid Lake fishery. The destruction of our way of life began 146 years ago when our ancestors had their first contact with the white man, Captain John

C. Fremont and his party. History records that my people were pleased and excited to share our treasures with those strangers. Little did we know what they had in store for us.

The Pyramid Lake Indian Reservation is located 36 miles northeast of Reno, Nevada and is 475,000 acres in size. Pyramid Lake itself is about 115,000 surface acres, located totally within the boundaries of the Reservation. Pyramid Lake receives its water from Lake Tahoe, 100 miles to the southwest via the Truckee River which flows through the Cities of Reno and Sparks and on to Pyramid Lake. Pyramid Lake is a terminal body of water with no outlet and with only the Truckee River as its supply of inflow. The lower 23 miles of the Truckee River also is part of our Reservation.

The Interior Department studied the recreational potential of Pyramid Lake. Among other things, the Department concluded:

> 1. Pyramid Lake by virtue of its huge proportions, year-round water-oriented recreation season, outstanding sport fishery potential, and wealth of esthetic, geological, archeological, historical, and ecological phenomena, is presently a recreation resource of national significance.
>
> 2. Pyramid Lake offers greater undeveloped potential for supporting high-quality water-based recreation opportunities

> for a large number of users than any other natural lake in northern Nevada and California.
>
> 3. If developed, Pyramid Lake could help meet the water-based recreation needs of a combined day-use and weekend/vacation-use zone (includes the San Francisco Bay Area) population estimated to reach 13.8 million by the year 2000. Visitation to Pyramid Lake by that year could total 4.5 million annual visits.
>
> 4. If Pyramid Lake's recreation resources are developed, significant tangible and intangible benefits will accrue to the United States, Nevada, Washoe County, the Reno-Sparks complex, local interests, and the Pyramid Lake Indian Tribe. With maximum development consistent with maintaining environmental quality, annual gross revenues from recreation at Pyramid Lake could total $3 million in general admission fees and $30,900,000 in visitor expenditures by the year 2000.

To understand the significance of Pyramid Lake and the Truckee River to our people you have to go back to our origins. The legend of the Stone Mother tells of the origin of our people. It tells of settlement of the Tribe, cui-ui tuccatta (cui-ui eaters); it tells of the Lake's origin, cui-ui pah (cui-ui lake); and the origin of its fish, the cui-ui. It tells us that all this creation was simultaneous, that the son of the Stone Mother became our ancestor, that the tears of the Stone Mother became our Lake, that the Lake's shore became our home and its depths the home of our fish, the cui-ui. This legend sets our identity and forever fixes our way of life.

There are three major components of our way of life - the people - cui-ui tuccatta, the Lake - cui-ui pah and the fish -cui-ui. These are inseparable components and one does not exist without the other. I know one might make light of this significance or write it off as romance, but to us it is everything. As we watched the celebration of the Statute of Liberty and the controversy surrounding the desecration of the flag, we know that your culture also holds important its own symbols, identities and rituals.

Since time immemorial the Tribe has lived near the shore of our Lake and has drawn its sustenance from its abundant supply. We were a prosperous people, our main sustenance being the cui-ui fish and the large Lahontan cutthroat trout. Most of our lives were spent gathering food and partaking in various festivals and ceremonies associated with those gatherings. There were rabbit drives, deer hunts, pine-nut gatherings, mudhen and duck harvests at adjoining Winnemucca Lake, trout fishing and many other forms of harvesting ventures. But nothing compared to the annual harvesting of the cui-ui.

The cui-ui would run in mid-spring which would allow for about a two or three week harvest. As the run developed, word was spread and the Tribe, made up of scattered bands, would come together to renew friendships and aid in the long but happy work of the harvest. Excitement would fill the air as many cui-ui were caught, dried, and stored for the coming year. The fish were abundant and could be caught by hand.

This was a time like no other. The animation in the eyes of the elders as they tell these stories only give us a glimpse of its meaning. This way of life continued for many, many generations but as the twentieth century started it all came to an abrupt end.

In 1902 under the infant Bureau of Reclamation, the first reclamation project was authorized. The plan was to direct water from the Truckee River upstream of Pyramid Lake to what was then a large desert basin to the east and to turn the sand into green fields and farm land. This project is known as the Newlands Project which has proven to be a failure as an agricultural project, has dealt a tremendous blow to the Tribe and is currently spelling death to any and all wildlife associated with its operation. To accomplish the Project, in 1905 Derby Dam was completed to enable Truckee River water to be diverted to the Project. Over the next 40 years, about half the flow of the

Truckee River, 250,000 acre feet per year, was diverted away from Pyramid Lake to the Newlands Project. As a direct result of these diversions, the elevation of Pyramid Lake dropped 70 feet creating an impassible delta between the lake and river, the Lahontan cutthroat trout became extinct in Pyramid Lake and the cui-ui numbers shrunk to a point where harvest became impossible. Pyramid's sister, Winnemucca Lake, dried completely taking with it its wildlife and wetlands habitat. It appeared our way of life and existence as a people were nearing an end.

In 1944 the Federal Government dealt another severe blow to our once magnificent fishery when the Bureau of Indian Affairs negotiated the Orr Ditch Decree. The decree was to put down in writing the various water allocations on the Truckee River. It was BIA's task to use the Winters Doctrine, under which the Supreme Court held that the water rights necessary to fulfill the purposes of an Indian reservation are impliedly reserved at the time of the reservation's creation, to protect our water and to preserve our way of life and our identity as a people. But early on in the forming of the decree BIA made a terrible error, an error that would set the tone for many decades of litigation and hardship for our Tribe. BIA determined that the government's purpose was that we should be farmers and, even though we continued to explain and insist on our status as fisherman, BIA went in to negotiate our rights only as farmers and not as fishermen. After the final gavel fell and the Orr Ditch Decree was set, the Tribe was to receive a water right of 31,000 acre-feet total from the Truckee River to be used only for irrigation for agriculture. Pyramid Lake and the fisheries were given no right of any kind and would only receive what was leftover after the Newlands Project and all other water rights were satisfied. From receiving 500,000 acre-feet of water annually (it takes at least 400,000 acre-feet annually just to replace evaporation losses and maintain the current Lake level) into Pyramid Lake before the turn of the century to ending up with a right to only 31,000 acre-feet for agriculture irrigation and zero right for fisheries after the *Orr Ditch* Decree, our Tribe's ability to maintain its livelihood and way of life became a near impossibility.

The huge diversions to the Newlands Project also fundamentally altered the geomorphology of the Truckee River and this is what leads directly to Section 203 of S. 2183. The lower 23 miles of the Truckee River within the Pyramid Lake Indian Reservation have undergone a pronounced period of destabilization caused by the lowering of the River's base level at Pyramid Lake. The River channel has been down-cut extensively and a large, 3 mile delta of fine alluvial deposits has been exposed at the mouth of the Truckee River. Following the incision of the channel, the deposition of eroded material caused the unstable channel to migrate laterally and erratically within the former flood plain terraces. The accelerated rate of bank erosion and flood plain deposition created shallow, braided and unconfined channel networks in the River in the 20 miles of the Truckee River above the delta and to an even greater extent in the delta. As the channel migrated, the once extensive riparian habitat eroded away.

To make matters worse, the Army Crops of Engineers entered the picture and embarked on its own Truckee River program in the early 1960s. As part of its flood control project on the upper Truckee River, the Corps deepened an underground reef at Vista at the eastern end of the Truckee Meadows to provide better protection for Reno and Sparks by preventing water from backing up behind the reef. This purpose was accomplished, unfortunately at the expense of the lower River. Deepening the reef increased the peak flood flows below Vista. To deal with this problem, the Corps channelized the lower river to create the additional capacity needed for the peak flood flows. The Corps' work on the lower River aggravated bank erosion, increased siltation of the spawning gravels, and contributed to changing the characteristics of the streambed from a narrow, deep, meandering channel to a wide, shallow and relatively straight channel. In some stretches, riparian vegetation was removed and has never recovered.

As one would expect, these changes have had and continue to have severe adverse impacts on the cui-ui and the Lahontan cutthroat trout. The delta at the mouth of the River created a barrier which prevented both species from migrating to their upstream spawning grounds. Spawning areas were damaged or destroyed by the bank erosion and the increased siltation of the gravels. The temperature of the River increased to unacceptable levels by the widening of the stream channel and the destruction of the riparian canopy. All of these conditions persist today.

In short, the lower Truckee River is a mess. All biologists agree that recovery of Pyramid Lake's listed species cannot be achieved unless conditions on the lower River are improved and restored and a solution is found to the delta access problem.

I am pleased to report that there is some good news. There has been some progress in recent years. In 1976, the federal government built Marble Bluff Dam about three miles above the mouth the River. Marble Bluff Dam has created a new equilibrium for the River, stopped the downcutting and stabilized the River above the Dam.

The Lahontan cutthroat trout have been reintroduced into Pyramid Lake. With the financial support of the Congress, the Tribe has built hatcheries which are ranked with the Nation's best. We have turned the trout fishery into a success which is now considered to be one of the top three trophy lakes in the United States. The Lahontan cutthroat trout is still listed as threatened, primarily because of its reliance on a artificial hatchery spawn, but its recovery is steady and it is our hope a complete recovery, including a natural spawn in the Truckee River, will occur in the future. The success of the Lahontan cutthroat trout will contribute to economic recovery for our Tribe.

The cui-ui have barely survived owing to some fortuitous wet years in the 1950s and 60s. We believe that the unusually wet cycle in the early and mid 1980s has produced some good cui-ui year classes but there have not been any spawning runs during the past three years owing to the severe drought. The cui-ui do not do well in a hatchery environment. They are almost totally dependent on natural spawning in the lower Truckee River.

The Tribe and the federal government have begun to focus on solutions to the lower River and delta access problems. Due primarily to Senator Reid's efforts, the Corps of Engineers has been authorized to study those two problems and to formulate solutions. Last year Congress appropriated funds to begin that work and the President's FY'91 Budget includes additional funding.

We have met several times with Corps officials. The meetings have been productive. The Corps' District Office in Sacramento is excited about the lower Truckee River projects and anxious to get to work. The Tribe favors restoration of the lower River to natural conditions with little or no rip-rap or concrete structures which would be out of place in our desert and rural environment. The local Corps officials seem to share that perspective.

With partial funding provided by EPA, the Tribe contracted with a consulting firm to evaluate the causes of the decline of the lower Truckee River and to prepare a stream restoration plan to begin the recovery of the riparian ecosystem. A draft report was completed last month and the final report is expected in May. We are very pleased by the draft report. The Corps has been involved in the process. Upon its completion, it will provide an excellent start on the project authorized and described in sections 203(a) and (b) of S. 2183.

We are not as far advanced on solving the more difficult and complex delta access problem, the project authorized and described in section 203(c). We will need to find the best possible experts to focus on this problem and to encourage them to be as creative as possible. Overcoming the barrier at the delta is absolutely essential to the conservation and recovery of both the cui-ui and the Lahontan cutthroat trout.

Section 203 of S. 2183 would authorize the two lower Truckee River projects to be undertaken in accordance with sections 906(e) and 1135 of the Water Resources Development Act of 1986, Public Law 99-662, 100 Stat. 4082 at 4187 and 4251. The Tribe believes that the two lower Truckee River projects are perfect candidates for implementation pursuant to these new environmental enhancement provisions.

The purpose of section 906(e) is to promote water resource activities designed to benefit threatened or endangered species. As I have previously explained, both lower Truckee River projects would serve that purpose. Indeed, neither the endangered cui-ui nor the threatened Lahontan cutthroat trout can be recovered without those projects.

Similarly, both lower Truckee River projects would fulfill the purposes and requirements of the demonstration programs authorized under section 1135. I should note here that the Pyramid Lake Indian Reservation is particularly deserving of a section 1135 demonstration program because the previous work performed by the Army Corps of Engineers on the lower Truckee River was necessary to accommodate the flood control project on the upper Truckee River but did not, to put it mildly, provide any benefits to the Reservation. In effect, the Reservation was sacrificed for the benefit of the upper Truckee River cities of Reno and Sparks. In this respect the Reservation received much less favorable treatment than other areas which might qualify for demonstration projects under section 1135.

I think it is also significant that both lower Truckee River projects would significantly enhance the most significant natural resources on the Pyramid Lake Indian Reservation and thereby contribute to the fulfillment of the federal government's trust responsibility to the Pyramid Lake Paiute Tribe. Section 905(c) of the Water Resources Development Act of 1986 obviously was intended to promote water resource activities to benefit Indian tribes and their reservations.

Finally, both lower Truckee River projects would contribute substantially to the development of the largely untapped recreational resources of Pyramid Lake. As previously explained, Pyramid Lake could be a recreational resource of national significance which would provide an extremely high quality experience for millions of American and foreign visitors. That kind of development also would generate significant economic benefits for the Tribe, the State, Washoe County and the Cities of Reno and Sparks.

I do not think I need to tell this Subcommittee how rare it is to find projects which will be advantageous to both the environment and the economy. With the added benefits to endangered and threatened species and the Pyramid Lake Paiute Tribe, the lower Truckee River projects authorized in section 203 are truly worthy of support. I hope they will be endorsed by this Subcommittee, the Congress and the Administration.

Thank you for inviting the Pyramid Lake Paiute Tribe to present this testimony and to appear before you.

Pyramid Lake Paiute Tribal Council
Post Office Box 256
Nixon, Nevada 89424
Telephone: (702) 574-0140, 574-0188

May 4, 1990

Honorable Daniel P. Moynihan
Chairman
Subcommittee on Water Resources,
Transportation and Infrastructure
Senate Committee on Environment and
Public Works
SD-458 Dirksen Senate Office Building
Washington, D.C. 20510

Re: S. 2183

Dear Senator Moynihan:

On behalf of the Pyramid Lake Paiute Tribe of Indians, I want to express our deep appreciation to you for including the two lower Truckee River environmental enhancement projects in section 203 of your bill, S. 2183, and for inviting me to testify at the hearing on April 19.

At the April 19 hearing, Senator Reid asked the Tribe to provide written answers to six questions regarding the two projects. My responses are enclosed. I will be glad to provide any additional information the Committee may desire.

Thank you again for your invaluable assistance in helping to recover Pyramid Lake's endangered cui-ui and threatened Lahontan cutthroat trout and to restore the Pyramid Lake to its preeminent status as one of the best inland fisheries in the world.

Sincerely yours,

Joseph H. Ely
Tribal Chairman

Enclosure
cc: (with enclosure)
Honorable Harry Reid
Tom Jensen
Jim Beirne
Patricia Zell
Eric Eberhard
Dale Snape

QUESTION #1 Chairman Ely, it's my understanding that the cui-ui was the first species to be listed under the Endangered Species Act. Is that correct?

Why do you think that it has taken so long to develop a recovery plan for the cui-ui?

ANSWER The cui-ui was one of the species included in the first federal listing of endangered species in 1967.

There are several reasons why it has taken so long to develop recovery plans. First, as the Senate Environment and Public Works Committee knows very well, the Fish and Wildlife Service generally has not put much emphasis on recovery of listed species. One of the major purposes of the 1988 amendments to the Endangered Species Act was to change that by directing the Service to stress the development and implementation of site-specific recovery plans.

Second, until relatively recently, not much was known about the cui-ui. Basic information was lacking about the life cycle of the cui-ui, when it spawns, where it spawns, how long it stays in the River, how much water is needed, etc. For example, we really did not know until 1986, which was an extremely wet year when about 40,000 adult cui-ui were able to traverse the delta and reach Marble Bluff Dam, how vital it is to improve the cui-ui's access to their Truckee River spawning grounds. I believe that we now have sufficient knowledge about the cui-ui to move ahead on recovery promptly and effectively.

Third, the Truckee River is probably the most litigated stream in the country. The cui-ui need more water and most everything that involves Truckee River water entails litigation and litigation costs a lot of money and takes a very long time. We have found that litigation is not an efficient way to achieve results although sometimes, unfortunately, it may be the only way.

Fourth, up until now, the Interior Department has borne most of the responsibility for achieving recovery. Working with Interior has not been easy. The principle cause of the cui-ui's near extinction and present precarious condition is the Newlands Reclamation Project which historically diverted about half the flow of the Truckee River away from Pyramid Lake to grow alfalfa in the high desert. The Bureau of Reclamation is a formidable force within Interior and most of its time and resources have been spent defending the Newlands Project and seeking to maintain the status quo as much as possible. Many of our letters to Interior never even get responses. We have had a very important letter pending since 1985 to which we have never received a response.

All of these factors along with northern Nevada politics, have contributed to delaying the development and implementation of a site-specific recovery plan for the endangered cui-ui.

QUESTION #2 Obviously, you consider the two projects in S. 2183 as beneficial to the possible recovery of the cui-ui. Explain again the benefits of these two projects to the fish.

ANSWER The Delta Access Project is absolutely critical. Under existing conditions, in most years the delta at the month of the Truckee River is a barrier which prevents both the cui-ui and the Lahontan cutthroat trout from migrating to their spawning grounds. The existing fishway is inadequate. The flows in the fishway are too small. The cui-ui cannot find it and they are not attracted to it. The larger fish, particularly the females who have the most eggs, get stuck in the fishway and cannot make it up to the Marble Bluff facility.

In a good year we can get about 5,000 fish up the fishway. By contrast, in 1986 when Pyramid Lake was at elevation 3816' (about 10 feet higher than it is today) and the fish could cross the delta, about 40,000 adults made it up to the Marble Bluff facility. The spawning results also are much better when the cui-ui can swim up the River because they arrive about a month earlier. That means that the River temperatures are cooler, more eggs hatch and more larvae survive and we can conserve more of our scarce water in Stampede Reservoir.

So we simply have to find a way to improve delta access so that spawning runs like 1986 can become a common occurrence instead of happening perhaps once every 15 or 20 years.

Lower River Restoration will do several things. It will improve spawning habitat and conditions by significantly reducing erosion and siltation, stabilizing the course of the River, making the lower River deeper (and therefore cooler) and providing much better nursery habitat, hopefully establishing conditions which will lead to the natural reproduction of trout, perhaps a fall/winter run, and restoring the riparian vegetation which will reduce water temperatures. The lower temperatures also will make it possible to conserve some of the limited water in Stampede Reservoir so that the cui-ui will be able to spawn more frequently.

I should also add that restoring the lower River will make the part of our Reservation where most of our people live much more beautiful and attractive, the way it once was. Right now it is degraded, almost an eyesore.

QUESTION #3 Why do you think that something like this hasn't been proposed by the Interior Department as part of their recovery efforts?

ANSWER As I previously stated in response to Question #1, working with the Interior Department has not been easy because of the Bureau of Reclamation's historic ties and allegiance to the

Newlands Reclamation Project. The Interior Department has talked about and recognized the need for a lower River Restoration Project and a Delta Access Project for a long time. But nothing concrete has been proposed.

Achieving recovery has not been a priority of the Interior Department. For example, the Newlands Project Operating Criteria and Procedures adopted by Interior in 1988 focused exclusively on the bare survival of the cui-ui. Despite the Tribe's continued protests that bare survival is not sufficient and that much more is required to meet Interior's legal obligations under both the Endangered Species Act and its trust responsibility, nothing was done to move beyond survival toward recovery.

The deficient design of the Marble Bluff Fishway probably is a good example of the kind of problem we have had with Interior. Without conducting the necessary research, Interior simply assumed that the delta access problem could be solved with a fishway that held a minimal amount of water, about 30 cubic feet per second. The Bureau of Reclamation wanted to solve the problem with as little water as possible so that the Newlands Project would be able to continue its historic diversions from the Truckee River. It turned out, of course, that the fishway is totally inadequate. Most of the cui-ui can't even find it and many of those who do find it are not enticed to spawn with that minimal flow. Reclamation probably would be reluctant to support a solution to the delta access problem which would require a larger commitment of flows for fear that diversions to the Newlands Project might have to be reduced.

Having complained about Interior's previous efforts, I should point out that the Fish and Wildlife Service appointed a recovery team last year. Although the recommended recovery plan is probably at least nine months away, I believe that the members of the recovery team, who are knowledgeable fish biologists, recognize the vital importance of delta access and lower river restoration. I think that those projects will be included in their proposed plan.

QUESTION #4 Why do you believe it is appropriate to be authorizing these projects under S. 2183?

ANSWER The two projects are needed to correct problems that the federal government created. As explained in my testimony, the delta was exposed and the lower Truckee River was degraded as a result of two federal projects, the cumulative impact of the huge diversions of Truckee River water away from Pyramid Lake to the Newlands Federal Reclamation Project since 1905, and the lowering of the Vista reefs and the channelling of the lower Truckee River by the Army Corps of Engineers in the early 1960s to help control flood damage upstream in the Truckee Meadows.

The federal government's policies have changed. Recovery of Pyramid Lake's endangered and threatened species and fulfillment of the trust responsibility to preserve and protect the Tribe's fishery at Pyramid Lake are now paramount federal objectives. These objectives cannot be achieved unless the delta access problem is solved and the lower Truckee River is rehabilitated and restored.

In my opinion it is fitting and proper for the federal government to undertake projects which are essential to correct problems the federal government has created and are necessary to carry out the federal government's current policies.

QUESTION #5 What can the federal government gain in return for funding these projects?

ANSWER The justification for authorizing and funding the two Truckee River projects is the fulfillment of high priority federal policies. The projects would go a long way toward achieving recovery of one endangered species and one threatened species and satisfying the federal government's trust responsibility to the Pyramid Lake Paiute Tribe to preserve and protect the Pyramid Lake fishery. They would also enhance the value of Pyramid Lake as a national recreational source. Pyramid Lake has great potential for providing very high quality recreational opportunities for millions of American and foreign visitors and significant economic benefits to the Tribe and the entire region.

The lower Truckee River projects would be authorized pursuant to sections 906(e) and 1135 of the Water Resources Development Act of 1986. In those two provisions, Congress recognized the benefits to be derived from water projects which: (i) benefit endangered or threatened species; and (ii) demonstrate how the adverse impacts of the previous Corps projects can be modified to improve the quality of the environment. The lower Truckee River projects would carry out the objectives of these two new important environmental enhancement provisions of the Corps' basic authorizing legislation. In addition, the lower Truckee River projects would carry out the policy of section 905(c) of the Water Resources and Development Act of 1986 by benefitting the water and related resources belonging to Indian tribes.

QUESTION #6 I have heard some comments to the effect that we probably can't recover the cui-ui so we shouldn't waste any more money. What is your attitude in this regard?

ANSWER I believe that the cui-ui can and must be recovered. I know that the Tribe will not rest until the cui-ui once again can be harvested so that their vital role in our culture and way of life can be restored.

Thanks largely to Senator Reid's efforts and the almost unbelievable progress that has been made under his leadership over the past 3-1/2 years, I sincerely believe that recovery will be achieved in the near future -- perhaps 10 to 15 years (with some help from the Mother Nature in the form of some wet years), if section 203 of S. 2183 and S. 1554 are enacted this year and are promptly and effectively implemented.

I believe that some of the skepticism to which you refer probably is due to the fact that the cui-ui are an endangered genus as well as an endangered species and that they are found in only one fragile place on our planet. For these reasons, I agree that we must be vigilant and cautious. But we now know that enormous progress is possible. If a solution is found to the delta access problem, the riparian canopy along the lower Truckee River is restored, the timing of the inflows to Pyramid Lake is shifted as provided in S. 1554 and Truckee River diversions to the Newlands Project continue to be reduced, I am confident that recovery of the cui-ui clearly is achievable.

STATEMENT OF

EMMETT C. LEE, JR.

DIRECTOR, PORT OF TAMPA

BEFORE THE

SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION AND INFRASTRUCTURE

OF THE

SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

ON

THE CORPS OF ENGINEERS' SINGLE BENEFICIARY POLICY

Mr. Chairman and Members of the Subcommittee:

Thank you for this opportunity to appear before the subcommittee to testify regarding the Administration's single beneficiary policy and its implementation at the Port of Tampa.

The Port of Tampa is the seventh largest port in the nation measured in terms of tonnage of cargo handled. Phosphate and phosphate-related products are by far the predominant cargo shipped through the port. Phosphate mining has been one of the State of Florida's major industries for over a century and Tampa Harbor serves the bulk of Florida's phosphate industry. Tampa Harbor leads the nation in the export of bulk phosphate rock and refined phosphate products, and its numerous terminal facilities together constitute the largest phosphate loading complex in the world.

Phosphate fertilizer is produced at the plants within 30 to 40 miles of the Tampa Harbor complex. The finished fertilizer is shipped out to domestic markets as well as international destinations, primarily Latin America, Europe, the U.S.S.R., the Near East, Asia and the Far East. Approximately 23.8 million tons of phosphate rock, dry fertilizers, and phosphoric acid are shipped to foreign and domestic destinations annually from the Port of Tampa.

Additionally, approximately 6.9 million tons of raw materials used in the production of phosphate products are received through the Port of Tampa from foreign and domestic origins.

In 1970 Congress authorized dredging of the main ship channel at the Tampa Port to 43 feet. The construction work was completed in 1985. Since the initial authorizing Act, the project has been reviewed and modified to include many of the auxiliary channels as a part of the authorized federal project. Each of these channels act as feeders to the main ship channel.

In total over $200 million has been expended by the federal government in improving the Tampa Harbor channels. The benefits of this Federal investment are evident, as port and port-related activities generate an economic output of $5.5 billion and over $600 million annually in federal corporate and personal taxes.

I testify today to express the Port Authority's concerns about a new Corps of Engineers' policy which is substituting for the Corps' traditional cost/benefit methods of assessing the federal interest in a proposed navigation project. I am referring to the single beneficiary policy which has recently been applied in two separate instances at the Port of Tampa. The new policy has precluded federal participation in improvements to two channels within the Tampa Harbor complex, the Alafia and Port Sutton Channels, both of which connect to the main ship channel and which are key to overall port operations.

In 1988 the Secretary of the Army recommended against federal participation in the Port Sutton improvement project, thereby preempting a very favorable report of the Chief of Engineers which strongly recommended federal participation in deepening the channel to a depth consistent with that of the main ship channel. The Chief's report was the result of a three year feasibility study which found the proposed improvements to be "economically justified, engineeringly feasible, and environmentally acceptable,"(1) and consistent with the national economic development plan (NED).

The same policy stands to undermine an ongoing study to assess Federal participation in improvements to the Alafia Channel, scheduled for completion late 1990 or early 1991. In contemplation of the Secretary's policy on single beneficiaries and its application to the Alafia Study, the Tampa Port Authority has committed to assume the total cost of incremental dredging improvements to the Alafia Channel, and has requested the Federal Government to continue maintenance dredging at the new depth, all permissible under current law. (2)

Not withstanding the negligible increase in cost to the Federal Government of maintaining the deeper channel and current legislation which permits such an undertaking, the Secretary has formally rejected the proposal by the Tampa Port Authority, citing the single beneficiary policy. Assuredly, the single beneficiary policy, unless changed, also promises an unfavorable report on the Alafia Study. All of this, not withstanding a preliminary report on the feasibility of Federal participation in deepening the Alafia Channel which reads:

"(this improvement) would allow usage of deeper draft vessels for transport of existing commodities resulting in a transportation savings to shippers. Navigation improvements at (Big Bend Channel) and the Alafia River would also allow these terminal facilities to be more competitive with other branch channels in Tampa Harbor." (3)

The Secretary of the Army's decisions with respect to the Port Sutton and Alafia Channel projects were based on the new single beneficiary policy which appears in Regulation No. 1165-2-123 issued on August 31, 1989. This new policy bases determination of federal interest on the ownership of the terminals on a navigation channel, in lieu of projected economic benefits which are determined through traditional cost/benefit procedures.

Under the new policy, if a single privately owned terminal is located on a channel, it (the terminal) is defined to be the only beneficiary of the improvement, regardless of the distribution of benefits to multiple shippers and shipping companies using that channel. The new policy determines that this "single entity" situation precludes any federal interest in the project.

Therefore, the Secretary has determined that Gardinier, which is the only terminal operator on the Alafia Channel, is the sole beneficiary of the proposed improvement. Under the policy ships calling at the Gardinier docks would not be beneficiaries of a deeper channel, despite the fact that the ships do not belong to Gardinier, are chartered by suppliers of raw materials and purchasers of finished product, and would be able to fully load thus reducing the unit cost of moving the product. In reference to the Port Sutton Channel, the Secretary has determined that the International Minerals and Chemical (IMC) terminal would be the sole beneficiary of that project, "not withstanding the fact that many different shippers use that terminal." (4) Indeed, during 1989, 32% of the product shipped through IMC was for the account of others. For the shippers using the Port Sutton Channel (which include Agrico Chemical Company, Freeport Phosphate Rock Company, Gardinier and some nine other companies) "topping off" of bulk phosphate carriers would no longer be required once the channel depth is consistent with the main ship channel. The additional costs associated with vessel delays, additional loading and overall increased ship handling would be eliminated. However, pursuant to the new policy, these shippers would not be beneficiaries.

In reference to the situation of a single terminal located on a channel, the Secretary indicates :

"(this) creates the possibility that the use of the terminal could be structured and constrained in a way that all benefits of the improvement would accrue to the single private owner." (5)

If the Secretary is referring to a situation of monopoly control over distribution costs, his concern is not justified with respect to the Tampa harbor in that the numerous phosphate terminals within the harbor complex create an intensely competitive environment which is not conducive to unduly high rate structures at any one location.

Indeed, it can be argued that the application of the single beneficiary policy to the Tampa Port actually limits the benefits of the deeper federal project to some users, but at the expense of those using the Alafia and Port Sutton Channels. Terminals on these channels are placed at an unfair competitive disadvantage to its competitors within the total harbor complex. Yet I believe it is worth noting the contribution that these very same terminals made to the dredging of the main ship channel. To help finance the non-federal share of construction on the main ship channel, $5 million was raised by way of a surcharge on bulk cargo. A significant amount of that accrued from surcharges on tonnage moving into and out of the Gardinier and IMC Terminals -- terminals which now find themselves disadvantaged by the current policy concerning single beneficiaries on branch channels.

Unfortunately, Mother Nature has not arranged all the land available for terminal sites within the Port of Tampa such that a single channel can serve them all. Like many other ports, various potential beneficiaries of the deeper main ship channel are necessarily located on finger channels, dictated by existing land forms and hydrography.

The construct of the Port of Tampa is such that with the application of the single beneficiary policy, terminals located on branch channels are precluded from benefiting from the main ship channel depth if they are unfortunate enough to be the only terminal on that channel. If two terminals lie in a more or less straight extension of a channel, then a federal interest exists; however, federal participation is not warranted should a second terminal be situated in a location that requires a slight turn onto an adjacent channel.

This policy is obviously flawed in its application to the Tampa Harbor complex where the many auxiliary channels are interdependent of each other. There are compelling reasons for considering each of these branch channels as simply another channel serving the total port navigation system, rather than as a single channel which benefits a single business entity. It makes sense that linking as many feeder channels as possible to the main ship channel would augment the federal investment already in place.

May I request the subcommittee's close and careful review of the single beneficiary policy, its application to the Port of Tampa, as well as the potential implications for other economically viable navigation projects throughout the country.

Implementation of this new policy sets a dangerous precedent for abandoning traditional cost/benefit analysis in determining project viability, and the criteria used to substitute the cost/benefit procedures are flawed, as is evidenced by their application to the Port of Tampa. Furthermore, the policy has not been afforded the opportunity for public review and comment.

Thank you in advance for providing a legislative solution which would repeal the single beneficiary policy and codify into law the long-established cost/benefit procedures for determining the federal interest in a navigation project.

SYLLABUS

(1) Report of the Chief of Engineers, Department of the Army, Port Sutton Channel, Florida, March 28, 1988

(2) Section 204 (e) (e) Operation and Maintenance of the Water Resources Development Act of 1986.

(3) Tampa Harbor Recommended Plan for Navigation, Alafia River and Big Bend Channel, 1984

(4) Letter to Senator Quentin Burdick from Assistant Secretary of the Army Robert W. Page, August 2, 1988

(5) Letter to Congressman Sam Gibbons from Assistant Secretary of the Army Robert W. Page, April 17, 1989

TESTIMONY BY

Steven J. Markey

Director, Supply and Distribution

GARDINIER, INC.
8813 Highway 41 South
Riverview, Florida 33569

Mr. Chairman, I am Steve Markey, Director of Supply and Distribution for Gardinier, Inc. Gardinier is a phosphate mining and fertilizer production company with its fertilizer plant located adjacent to the Alafia River channel in Tampa Bay, Florida.

The international phosphate market, in which the United States, as an exporter of phosphate, plays a major role, is intensely competitive. The Port of Tampa, being the chief origination point for U. S. phosphate exports, has 5 phosphate terminals served by federally maintained channels. Four of the five channels are maintained at 34' or more while the channel serving the Gardinier terminal is maintained at 30'.

Unfortunately, the 30-foot depth restricts the size of vessel and cargo that can be loaded at the Gardinier terminal vs. the other phosphate terminals in the port. In many cases then, customers must either forego use of Gardinier facilities altogether or complete cargo loading at a second berth. The latter, of course, increases port congestion and results in substantially higher shipping charges, product shrinkage due to extra handling, and demurrage charges when vessels encounter delays entering a second berth for topping off. In February, for example, Gardinier incurred over $36,000 in demurrage charges for just one vessel, when completion of loading at a second terminal in the port was delayed a full five days. This was not an isolated occurrence.

My company has attempted to remedy this situation, which discourages our customers and other potential shippers while lessening overall port efficiency and competitiveness, by offering to pay for the deepening of the Alafia River channel to 34 feet at company expense.

However, the Corps of Engineers has taken the position that they will not maintain improvements to federal channels that serve a single beneficiary. The problem for us arises from the Corps' new definition of a single beneficiary facility. The Corps now maintains that ownership rather than usership is the criterion for establishing the existence of multiple or single beneficiary.

Mr. Chairman, we find the Corps' definition of a single beneficiary facility completely without merit. At best, it is arbitrary and discriminatory. Assistant Secretary Page wrote Senator Burdick last fall that "only two entities are required to demonstrate widespread and general benefits" from a federally maintained channel. In other words, because Gardinier has the bad luck to be the only facility on the Alafia River channel, the federal government would turn its back on this terminal, while those on the bay who happen to have neighbors receive all the benefits of federal support.

The Corps' single-owner policy confuses and ignores the real issue in assessing beneficiaries of a federally supported project, namely, multiple users of the facility in question. In fact, many users benefit or stand to benefit from Gardinier's facility and a deeper Alafia channel.

For example, as a result of a recent modernization program, 40 percent of Gardinier's present dry bulk cargo loadout capacity stands ready for other shippers. Four other phosphate producers have expressed interest in regular use of our dry bulk loadout facilities if the Alafia channel is deepened. Our terminaling capacity for molten sulphur, a major raw material for phosphate fertilizer production, is also under expansion. However, our 30-foot channel will not allow any of the Gulf of Mexico based fleet of molten sulphur vessels to come in fully loaded. Thus, maximum utility of this terminal capacity addition to the Tampa Port system will not be realized.

We can only assume that the single owner criterion is being used as a means to block projects in an attempt to protect the federal budget. In our case, however, Gardinier is prepared to pay for the initial dredging costs to 34 feet. We estimate that any additional cost of maintaining the Alafia channel at 34 feet vs. 30 feet will be virtually unmeasurable.

Mr. Chairman, we believe that Congress should reverse the Corps' definition of single beneficiary to make it contingent upon usership rather than ownership. The problem is larger than just the Alafia channel. The single-owner definition is only going to cause unreasonable and uneconomic restructuring of facility ownership schemes around the country to satisfy this arbitrary requirement.

At the very least, however, we do ask for help from Congress to assure that the Corps of Engineers maintains the Alafia River channel in Tampa Bay, Florida, at a minimum depth of 34 feet. This depth is consistent with the depth of channels serving other phosphate loading facilities in the bay and therefore with optimizing overall port efficiency. Moreover, maintenance at this new depth will not cost the federal government any additional money.

Thank you very much for the opportunity to participate in this hearing.

TESTIMONY

PRESENTED BY:

R. BARRY PALMER
EXECUTIVE DIRECTOR
DINAMO
THE ASSOCIATION FOR THE DEVELOPMENT
OF INLAND NAVIGATION IN AMERICA'S OHIO VALLEY
PITTSBURGH, PENNSYLVANIA

PRESENTED TO:

U.S. SENATE COMMITTEE ON ENVIRONMENT AND PUBLIC WORK
SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION
AND INFRASTRUCTURE

APRIL 19, 1990

DEAR MR. CHAIRMAN:

I AM BARRY PALMER EXECUTIVE DIRECTOR OF DINAMO, THE ASSOCIATION FOR THE DEVELOPMENT OF INLAND NAVIGATION IN AMERICA'S OHIO VALLEY. I AM HERE THIS AFTERNOON IN PRESENTATION OF TESTIMONY SUPPORTING CONGRESSIONAL AUTHORIZATION, SUBJECT TO A FINAL REPORT OF THE CHIEF OF ENGINEERS, FOR A NEW 110' X 1,200' LOCK AT THE MCALPINE LOCK AND DAM, INDIANA/KENTUCKY, OHIO RIVER, IMPROVEMENTS AT MONONGAHELA RIVER LOCKS AND DAMS 2, 3, AND 4, PENNSYLVANIA, AND FOR A NEW LOCK, THE MARMET LOCK AND DAM ON THE KANAWHA RIVER, WEST VIRGINIA.

IN APPEARING BEFORE THIS DISTINGUISHED SUBCOMMITTEE , I AM FULLY COGNIZANT THAT THE CORPS OF ENGINEERS HAS NOT YET PROCESSED THE FINAL REPORTS OF THE CHIEF OF ENGINEERS WITH RESPECT TO THESE FIVE PROJECTS. HOWEVER, MR. CHAIRMAN, THE CASE FOR EXPEDITIOUS CONGRESSIONAL ACTION ON THESE PROJECTS IS FULLY WARRANTED. FIRST, WE ARE URGING EXPEDITIOUS MODERNIZATION OF MCALPINE LOCK AND DAM, OHIO RIVER, KENTUCKY/INDIANA, PRINCIPALLY REPLACEMENT OF THE PRESENT 600' AUXILIARY LOCK CHAMBER WITH A NEW 110' X 1,200' LOCK, RESULTING IN TWIN 1,200' LOCKS AT THE PROJECT. WE SUPPORT CONSTRUCTION OF A NEW 1,200' FACILITY FOR THE FOLLOWING REASONS: 1) PRESENT AND FUTURE TRAFFIC NEEDS DICTATE CONSTRUCTION OF AN ADDITIONAL 110' X 1,200' LOCK; 2) THE BENEFITS OF MODERN LOCKS AND DAMS AT MCALPINE ARE VITAL TO THE DISTRIBUTION OF THE OHIO VALLEY'S COMMERCE INCLUDING, COAL, PETROLEUM, CHEMICALS, STEEL, AGGREGATES AND AGRICULTURAL PRODUCTS; AND 3) THE CURRENT RECOMMENDED PLAN B BY THE LOUISVILLE DISTRICT, U.S. ARMY CORPS OF ENGINEERS APPEARS NOT TO IMPACT ADVERSELY, THE FALLS OF THE OHIO WILDLIFE CONSERVATION AREA.

THE RECOMMENDED PLAN IS SUPPORTED BY THE GOVERNOR'S OF INDIANA AND KENTUCKY AND BY CONGRESSIONAL INTERESTS OF THE AFFECTED STATE OF INDIANA AND THE COMMONWEALTH OF KENTUCKY.

NOTE: Attachments to this statement have been retained in committee files.

IN 1986 COMMERCIAL TRAFFIC AT MCALPINE LOCKS AND DAM WAS 53.4 MILLION TONS AND IS PROJECTED TO INCREASE TO 72.0 MILLION TONS BY THE YEAR 2000 AND 141.6 MILLION TONS BY THE YEAR 2050. MCALPINE IS STRATEGICALLY LOCATED ON THE OHIO RIVER BETWEEN PITTSBURGH, PENNSYLVANIA -- AMERICA'S LARGEST INLAND NAVIGATION PORT -- AND THE MISSISSIPPI RIVER, GATEWAY TO THE GULF IN NEW ORLEANS AND THE UPPER REACHES OF THE MISSISSIPPI IN MINNEAPOLIS/ST. PAUL. ANY SCHEDULED OR UNSCHEDULED SHUTDOWN OF THE MAIN LOCK AND SUBSEQUENT SUSTAINED OPERATION OF AUXILIARY LOCK WILL LEAD TO SUBSTANTIAL DELAYS. FOR EXAMPLE, THE MAIN 1,200' LOCK WAS CLOSED FOR TRAFFIC FOR 35 DAYS IN JUNE AND OCTOBER 1987, FORCING SUSTAINED USE OF THE AUXILIARY 600' CHAMBER. 723 TOWS WERE DELAYED AN AVERAGE OF 30 HOURS PER TOW, COSTING INDUSTRY AN ESTIMATED $4.4 MILLION. BETWEEN 1982 AND 1988 TOW DELAY COSTS AT MCALPINE TOTALLED $28.3 MILLION. BY THE YEAR 2000 THIS PROBLEM IS EXPECTED TO BECOME EVEN MORE SEVERE AS THE AUXILIARY CHAMBER WILL BE RELIED UPON TO HANDLE TRAFFIC LEVELS THAT GREATLY EXCEED ITS CAPACITY. THESE DELAYS PENALIZE OHIO RIVER INDUSTRY AND COMMERCE, AND IF NOT CORRECTED WILL RETARD OUT REGION'S COMPETITIVE EDGE IN A GLOBAL ECONOMY.

DINAMO HAS BEEN INVOLVED IN THE PLANNING PROCESS OF THE CORPS OF ENGINEERS FOR MANY YEARS WITH RESPECT TO THE MCALPINE IMPROVEMENT PROJECT. WE HAVE PARTICULARLY FOCUSED ON THE NAVIGABILITY AND OPERATIONAL SAFETY OF THE RECOMMENDED PLAN, AS WELL AS THE COMPATABILITY OF THE RECOMMENDED PROJECT WITH RESPECT TO FUTURE NEEDS OF FACILITIES UPSTREAM AND DOWNSTREAM OF MCALPINE. AN IMPRESSIVE FACTOR THAT COMPELS STRONG SUPPORT FOR THE NEW 1,200' LOCK IS THE COMMONALITY OF TRAFFIC THAT TRANSITS MCALPINE AND OTHER LOCKS UPSTREAM AND

DOWNSTREAM. FOR EXAMPLE, NEARLY 70% OF THE TRAFFIC THAT TRANSITS THE MCALPINE FACILITY ALSO TRAVELS THROUGH LOCKS AND DAM 52. ADDITIONALLY MORE THAN 47% OF THE TRAFFIC THROUGH THE GALLIPOLIS LOCKS TRANSITS MCALPINE LOCKS.

THE BENEFITS OF THE MCALPINE LOCKS AND DAM ARE WIDESPREAD. TWENTY STATES EITHER RECEIVE OR SHIP COMMERCE THROUGH THE MCALPINE FACILITY. WHILE THE IMPROVEMENT IS ESTIMATED TO COST $219 MILLION, THE INCREMENTAL AVERAGE ANNUAL BENEFITS AND COSTS ASSOCIATED WITH PLAN B, WHEN COMPARED AGAINST THE WITHOUT CONDITIONS, ARE $30,300,000 AND $19,500,000, RESPECTIVELY, RESULTING IN A BENEFIT TO COST RATIO OF 1.6. ANNUAL NET BENEFITS, INCREMENTAL TO THE WITHOUT PROJECT CONDITION ARE $10,800,000. SIMPLY STATED, THE NATION SAVES $10.8 MILLION ANNUALLY IN TRANSPORTATION COSTS THROUGHOUT THE LIFE OF THE PROJECT BY THE MODERN TWIN 110' x 1,200' LOCKS AT MCALPINE.

NEXT MR. CHAIRMAN, WE ARE URGING THE CONDITIONAL AUTHORIZATION FOR IMPROVEMENTS OF LOCK AND DAMS 2, 3, AND 4, ON THE MONONGAHELA RIVER. DINAMO HAS PARTICIPATED FULLY OVER THE PAST THREE YEARS IN A NUMBER OF VERY IMPORTANT STEPS OF THE CORPS OF ENGINEERS PROCESS FOR THE LOCK AND DAM MODERNIZATION STUDY. DINAMO REPRESENTATIVES PARTICIPATED, FOR EXAMPLE, IN THE ISSUE RESOLUTION CONFERENCE CONDUCTED ON NOVEMBER 1 AND 2 IN PITTSBURGH, PENNSYLVANIA TO EXAMINE THE CONDITION OF THE INLAND NAVIGATION FACILITIES AT LOCKS AND DAMS 2, 3, AND 4, MONONGAHELA RIVER, AND IN THE DEVELOPMENT OF "WITHOUT PROJECT CONDITION," THE BASIS FOR ANY FEASIBILITY STUDY. ADDITIONALLY, WE PARTICIPATED ON JANUARY 17, 1990 IN A MEETING CONDUCTED BY THE PITTSBURGH DISTRICT, U.S. ARMY CORPS OF ENGINEERS, IN PITTSBURGH, PENNSYLVANIA TO EVALUATE ALTERNATIVE MODERNIZATION

ACTIONS AND TO ARRIVE AT A CONSENSUS OF THE BEST PLAN FOR IMPROVEMENT OF INLAND NAVIGATION FACILITIES ALONG THE STRETCH OF THE RIVER.

THE PROBLEMS OF MONONGAHELA RIVER LOCKS AND DAMS 2, 3, AND 4 ARE THEIR AGE, DETERIORATION, AND OBSOLESCENCE. FOR EXAMPLE, AT LOCK AND DAM 2, THE DAM NEEDS TO BE REPLACED. BUILT NEARLY 90 YEARS AGO, THE CONDITION OF THE FACILITY INCLUDING ITS DETERIORATION AND INSTABILITY, IS SUCH THAT THE CORPS OF ENGINEERS REPORTS THERE IS A SUBSTANTIAL CHANCE THAT SOME COMPONENTS WILL FAIL BY THE TURN OF THE CENTURY. THE MAIN LOCK CHAMBER AT MONONGAHELA RIVER LOCK AND DAM 2, IS 110' X 720' LONG, AND IT IS COMPATIBLE WITH THE WIDTH OF THE MAIN PRIMARY LOCK AT THE EMSWORTH LOCKS AND DAM, DOWNRIVER ON THE OHIO.

MONONGAHELA RIVER LOCKS AND DAM 3, BUILT NEARLY 85 YEARS AGO, NEEDS TO BE REPLACED. THE PITTSBURGH DISTRICT'S TOP ENGINEERING MANAGERS HAVE TOLD US THAT THE CONDITION OF LOCKS AND DAM 3 IS OF SUCH SERIOUS CONDITION THAT IN THEIR RISK ANALYSIS THEY CAN NOT DETERMINE WHETHER THE LOCK OR DAM WILL SLIDE, TIP, OR CRUMBLE INTO THE RIVER. LIKE DAM 2, THE PITTSBURGH DISTRICT ENGINEERS STATE THERE IS A SUBSTANTIAL CHANCE THAT SOME COMPONENTS OF THE LOCK AND THE DAM WILL FAIL BY THE YEAR 2000. THE LOCK SIZES AND LOCK AND DAM 3 ARE 56' X 720' LONG, NEARLY HALF THE WIDTH OF THE MAIN LOCK AT LOCK AND DAM 2.

LOCKS AND DAM 4 IS APPROXIMATELY 58 YEARS OLD. ITS STRUCTURAL CONDITION APPEARS TO BE IN SATISFACTORY CONDITION FOR ITS AGE, BUT THE LOCK CHAMBERS ARE 56' X 720' AND 56' X 360', AT LEAST HALF OF THE WIDTH NECESSARY FOR MODERN TRAFFIC CONDITIONS ON THE LOWER MONONGAHELA RIVER. NEW LOCKS AT THIS FACILITY WILL BE NEEDED IN THE FUTURE, MR. CHAIRMAN, BUT THE TIMING FOR THIS ACTION HAS

NOT YET BEEN DETERMINED.

NEXT, MR. CHAIRMAN, WE ARE URGING CONDITIONAL AUTHORIZATION SUBJECT TO A FINAL REPORT OF THE CHIEF OF ENGINEERS OF THE MARMET LOCK AND DAM ON THE KANAWHA RIVER. MARMET IS CURRENTLY PART OF THE KANAWHA RIVER NAVIGATION STUDY WHICH WAS AUTHORIZED BY CONGRESS IN 1977. CURRENT TRAFFIC LEVELS AT MARMET ARE OVER 12 MILLION TONS PER YEAR, WITH COAL BEING THE PRIMARY COMMODITY. THE PRIMARY NAVIGATION PROBLEMS AT MARMET ARE THE SMALL LOCK CHAMBERS, 360' X 56' LONG, RESULTING IN TRAFFIC CONGESTION AND DELAYS. IT IS PROJECTED THAT THE TRAFFIC DEMAND WILL INCREASE TO OVER 20 MILLION TONS, THE MAXIMUM CAPACITY OF THE LOCKS AS EARLY AS 1995, BECAUSE OF THE ANTICIPATED PASSING OF THE CLEAN AIR ACT AND INCREASE IN DEMAND OF LOW SULFUR COAL.

DINAMO'S MEMBERS HAVE BEEN PARTICIPATING IN NUMEROUS PARTS OF THE HUNTINGTON DISTRICT, U.S. ARMY CORPS OF ENGINEERS STUDY PROCESS AND IT IS CLEAR TO US THAT A NEW MODERN LOCK, PREFERABLY WITH A SINGLE LOCK CHAMBER OF 110' X 800' LONG, WHICH WOULD BE COMPATIBLE WITH THE NEW LOCK THAT IS BEING BUILT AT THE WINFIELD LOCK AND DAM DOWNRIVER OF MARMET.

MR. CHAIRMAN, I HAVE ATTACHED TO THIS TESTIMONY, SUMMARY FACT SHEETS ON THE MCALPINE PROJECT AND THE MONONGAHELA RIVER LOCKS AND DAMS 2,3, AND 4 PROJECTS. ALSO ATTACHED ARE THREE DINAMO ECONOMIC REPORTS THAT WE WOULD APPRECIATE BEING INCORPORATED AS A PART OF THE RECORD OF THIS HEARING. THEY ARE AS FOLLOWS; "RELIEVING WATERWAY BOTTLENECKS: THE IMPORTANCE TO THE COAL INDUSTRY OF WEST VIRGINIA AND KENTUCKY", DATED, AUGUST, 1989; "THE MODERNIZATION OF THE OHIO RIVER NAVIGATION SYSTEM AND THE DISTRIBUTION OF PETROLEUM PRODUCTS", DATED, OCTOBER, 1989; AND "RELIEVING WATERWAYS BOTTLENECKS: IMPORTANCE TO THE COAL INDUSTRY OF OHIO", DATED, MARCH, 1990. THESE REPORTS, MR. CHAIRMAN, STRONGLY URGE THE CONTINUED MODERNIZATION OF THE LOCK AND DAM SYSTEM ON THE OHIO RIVER AND ITS NAVIGABLE TRIBUTARIES, BECAUSE, IMPROVEMENTS IN OUR LOCK AND DAM FACILITIES IS CRITICAL TO THE FUTURE ECONOMIC HEALTH OF THE REGION. THE RIVER'S HAVE BEEN AN IMPORTANT ECONOMIC GENERATOR, AND THEY WILL CONTINUE TO BE AN IMPORTANT ECONOMIC GENERATOR AS LONG AS WE HAVE MODERN, EFFICIENT LOCKS AND DAMS. WE ARE MOST GRATEFUL TO THE TREMENDOUS HISTORY OF SUPPORT OF THIS COMMITTEE FOR AN ORDERLY INLAND NAVIGATION SYSTEM MODERNIZATION PROGRAM IN THE NATION AND THE OHIO VALLEY. WE LOOK FORWARD TO WORKING WITH YOU CLOSELY IN THE FUTURE AND THANK YOU FOR THE OPPORTUNITY TO BE HERE TODAY.

George E. Evans, Jr.

Special Assistant to the Governor for Coal and Energy Policy

Commonwealth of Kentucky

TESTIMONY CONCERNING IMPROVEMENTS AT MCALPINE LOCKS AND DAM OHIO RIVER, KENTUCKY/INDIANA

before the

United States Senate

Committee on Environment and Public Works,

Subcommittee on Water Resources, Infrastructure, and Transportation

Washington, D.C.

April 19, 1990

George E. Evans, Jr.
Special Assistant to the Governor for Coal and Energy Policy
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TESTIMONY CONCERNING IMPROVEMENTS AT MCALPINE LOCKS AND DAM

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United States Senate
Committee on Environment and Public Works,
Subcommittee on Water Resources, Infrastructure, and Transportation

April 19, 1990

Thank you, Mr. Chairman. It is an honor to have this opportunity to address this subcommittee on a matter of great importance to the coal industry of the Commonwealth of Kentucky.

I am William H. Bowker, Executive Assistant in the Governor's Office for Coal and Energy Policy, Commonwealth of Kentucky. I am presenting testimony today on behalf of George E. Evans, Jr., Special Assistant to Governor Wallace G. Wilkinson for Coal and Energy Policy. Mr. Evans regrets that he could not be here today, but he asked that I express strongly his support for the Ohio River navigation improvements which this Committee is considering today.

Kentucky is grateful for the very important improvements in the Ohio River Navigation System which the Congress has approved in recent years. I am here today to express, on behalf of Mr. Evans, the strong support of Kentucky for Congressional authorization, subject to a final report of the Chief of Engineers, for a new 110-foot by 1200-foot lock at the McAlpine Lock and Dam, Ohio River, Kentucky/Indiana.

No task is more important in improving the economies of the Ohio Valley states, including Kentucky, Illinois, Indiana, West Virginia, Ohio, and Western Pennsylvania, than the orderly modernization of the lock and dam infrastructure on the Ohio River Navigation System.

Many of the locks and dams in the Ohio River region are old and deteriorated, and in some cases are obsolete. Kentucky has joined with other Ohio Valley states and the business, industrial, and labor leadership in the region to press for modernization of lock and dam infrastructure in the region. Focus and leadership for these efforts has been provided by the Association for the Development of Inland Navigation in America's Ohio Valley (DINAMO). Kentucky state government and business and industry in Kentucky have been integral parts of this effort since DINAMO was launched in March, 1981. George Evans is currently a member of the Executive Committee and the Board of Directors of DINAMO.

Modernization of the McAlpine Lock and Dam would consist of replacing the present 600-foot auxiliary lock chamber with a new 110-foot by 1200-foot lock, resulting in twin 1200-foot locks at the location.

Kentucky supports construction of the new 1200-foot facility for the following reasons:

(1) present and future traffic needs require construction of the second 110-foot by 1200-foot lock;

(2) modern locks and dams at McAlpine are vital to the distribution of Kentucky's commerce, including coal, petroleum and petroleum products, chemicals, steel, aggregates, and agricultural products;

(3) the current recommended Plan B by the Louisville District, U.S. Army Corps of Engineers, appears not to impact adversely the Falls of the Ohio Wildlife Conservation Area.

In 1987, commercial traffic at the McAlpine Locks and Dam was 53.9 million tons and is projected to increase to over 72 million tons by the year 2000 and to almost 142 million tons by the year 2050.

McAlpine is strategically located on the Ohio River between Pittsburgh -- America's largest inland navigation port -- and the Mississippi River, from the New Orleans gateway to the Gulf to the upper reaches in Minneapolis/St. Paul. Any scheduled or unscheduled shutdown of the main lock and subsequent operation of the present auxiliary lock will lead to substantial delays. For example, when the main 1200-foot lock was closed to traffic for 35 days in June and October, 1987, forcing sustained use of the auxiliary 600-foot chamber, 723 tows were delayed an average of 30 hours. In 1988, tow delay costs at McAlpine totalled $28.4 million. By the year 2000, the delay problem is expected to become even more severe as the auxiliary chamber will be relied upon to handle traffic levels that greatly exceed its capacity. These delays penalize Ohio River industry and commerce, and, if not corrected, will decrease our region's ability to compete in a global economy.

Kentucky has been involved in the planning process of the Corps of Engineers for many years with respect to the McAlpine improvement project. We have particularly focused on the navigability and operational safety of the recommended plan, as well as the compatability of the recommended project with respect to future needs of facilities upstream and downstream of McAlpine. An impressive factor that compels strong support for the new 1200-foot lock is the commonality of traffic that transits McAlpine and other locks upstream and downstream. For example, nearly 70 percent of the traffic that transits the McAlpine facility also travels through Locks and Dam 52. Additionally, more than 47 percent of the traffic through the Gallipolis Locks transits McAlpine Locks.

The benefits of improvement to McAlpine Locks and Dam will be widespread. Twenty states either receive or ship commerce through the McAlpine facility. The incremental average annual benefits of the $219 million Plan B project are expected to be $30.3 million, compared to costs of $19.5 million, resulting a benefit-to-cost ratio of 1:6. Throughout the life of the improvements, the modern twin 110-foot by 1200-foot locks will save the nation $10.8 million annually in transportation costs.

Kentucky coal depends heavily on water transportation. In 1986, Kentucky shipped 37.9 million tons of coal on the Ohio River navigation system. Nearly two-thirds of this coal moved through out-dated and obsolete lock and dam facilities. This tonnage had a mine value of $978.3 million. Totalling one-quarter of Kentucky's coal production in 1986, the 37.9 million tons represented employment of approximately 8,600 miners and of approximately 21,500 persons in total. The coal shipped on the river generated approximately $130.7 million in state tax revenue.

We believe that it is imperative to improve the Ohio River Navigation System as expeditiously as possible. Coal is a $4 billion per year industry in Kentucky and employs almost 32,000 persons in high-paying coal mining jobs. Kentucky ships more coal by river than any other state. Much that does not move by river moves by rail at watercompetitive rates. The Kentucky coal industry faces change and challenge as never before in coming years. There is also great opportunity, especially in rapidly-growing international demand for coal. We urge the Congress to ensure that the Kentucky coal industry can continue to contribute to the economic growth of Kentucky and the Ohio Valley and to the energy security of the United States.

Again, on behalf of George E. Evans, Jr., I thank you for this opportunity to address the subcommittee on this matter of great importance to the Commonwealth of Kentucky.

TESTIMONY OF WILLIAM J. HAHNE, USS, A DIVISION OF USX CORP. BEFORE THE SENATE ENVIRONMENT AND PUBLIC WORKS SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION AND INFRASTRUCTURE
APRIL 19, 1990

"IMPORTANCE OF THE RIVERS TO THE STEEL INDUSTRY"

HISTORICALLY, STEEL MILLS IN THIS COUNTRY, INCLUDING USS, INTEGRATED BOTH THEIR IRON MAKING AND COKE MAKING PROCESSES INTO SINGLE PLANT LOCATIONS. HOWEVER, AT USS, REDUCED COKE REQUIREMENTS, RESULTING FROM THE RATIONALIZATION OF STEEL CAPACITY SINCE 1980, MOVED THE CORPORATION TO CENTRALIZE COKING OPERATIONS FOR OUR EASTERN AND SOUTHERN MILLS AT A SINGLE LOCATION.

COKE FROM COAL

THE CHEMICAL COMPOUNDS MAKING UP COAL, LIKE MOST OF THOSE IN ANIMAL AND VEGETABLE LIFE, ARE UNSTABLE WHEN SUBJECTED TO A HIGH DEGREE OF HEAT OR THERMAL TREATMENT.

THERE ARE TWO METHODS FOR MANUFACTURING METALLURGICAL COKE, KNOWN AS THE **BEEHIVE PROCESS**, AND THE **BY-PRODUCT** OR **RETORT PROCESS**. CLAIRTON UTILIZES THE BY-PRODUCT METHOD. IN THIS METHOD, AIR IS EXCLUDED FROM THE COKING CHAMBERS, AND THE NECESSARY HEAT FOR DISTILLATION IS SUPPLIED FROM EXTERNAL COMBUSTION OF SOME OF THE GAS RECOVERED FROM THE COKING PROCESS. WHEN THE PRODUCTION OF COKE IS ACCOMPLISHED IN MODERN BY-PRODUCT COKE OVENS WITH EQUIPMENT FOR RECOVERING THE COAL CHEMICALS, ONE NET TON OF COKING COAL IN TYPICAL AMERICAN PRACTICE YIELDS ABOUT THE FOLLOWING

PROPORTIONS OF THE SEVERAL COAL CHEMICALS AND COKE, DEPENDING UPON THE TYPE OF COAL CARBONIZED, CARBONIZATION TEMPERATURE AND METHOD OF COAL-CHEMICAL RECOVERY:

BLAST-FURNACE COKE	1,200-1,400 LB.
COKE BREEZE	100-200 LB.
COKE-OVEN GAS	9,500-11,500 CU. FT.
TAR	8-12 GAL.
AMMONIUM SULPHATE	20-28 LB.
AMMONIA LIQUOR	15-35 GAL.
LIGHT OIL	2.5-4 GAL.

BLAST FURNACE COKE IS THE PRIMARY PRODUCT AND IS USED IN THE PRODUCTION OF IRON IN BLAST FURNACES. THE IRON (HOT METAL) IS SUBSEQUENTLY USED IN THE BOP SHOPS OR OPEN HEARTHS TO MAKE STEEL. CLAIRTON'S COKE OVENS HAVE THE CAPACITY TO PRODUCE ABOUT 4.6 MILLION TONS OF COKE ANNUALLY FROM ABOUT 6.2 MILLION TONS OF COAL.

CLAIRTON WORKS

CLAIRTON WORKS, AT MILE POINT 19 ABOVE LOCK 2 ON THE MONONGAHELA RIVER, WITH ITS ACCESS TO LOWER COST RIVER TRANSPORTATION FOR THE COALS UTILIZED IN THE COKE MAKING PROCESS, HAS PREVAILED AS THE PRINCIPAL COKING SOURCE FOR USS AND USS/KOBE IRON MAKING FACILITIES LOCATED IN FAIRFIELD, AL; LORAIN, OH; FAIRLESS, PA; GARY, IN; AND MON VALLEY WORKS HERE IN PITTSBURGH. CLAIRTON WORKS IS THE PRINCIPAL PRODUCER OF METALLURGICAL COKE IN USS AND IS ONE OF THE

LARGEST COKE PLANTS IN THE WORLD. OVER 15,000 TONS OF COAL ARE PROCESSED DAILY TO PRODUCE ABOUT 11,000 TONS OF COKE. THERE ARE TEN OPERATING BATTERIES CONSISTING OF 694 OVENS. THERE ARE TWO ADDITIONAL BATTERY UNITS WHICH WERE BROUGHT ON LINE LAST OCTOBER AT A REHABILITATION COST OF $19 MILLION, INCREASING COKE PRODUCTION TO 12,600 TONS/DAY AND COAL REQUIREMENTS TO 17,200 TONS/DAY. CONSISTENT WITH THIS DECISION AND INDICATIVE OF USS' COMMITMENT AND DEPENDENCY UPON WATER TRANSPORTATION, CAPITAL EXPENDITURES OF OVER $15 MILLION HAVE BEEN SPENT OR COMMITTED TO MODERNIZING COAL BARGE UNLOADING FACILITIES AT CLAIRTON WORKS. THIS IS IN ADDITION TO THE $19 MILLION PREVIOUSLY MENTIONED FOR TWO ADDITIONAL BATTERIES. BOTH HIGH AND LOW VOLATILE COALS ARE UTILIZED IN THE COKE MAKING PROCESS. LOW VOL COAL IS HIGH IN CARBON AND IMPARTS STRENGTH TO THE COKE. DUE TO ITS EXPANSION CHARACTERISTICS, HOWEVER, THE USE OF LOW VOL COAL ALONE WOULD SPLIT THE WALLS OF THE COKE OVENS. HIGH VOL COAL, WHICH SHRINKS IN THE OVENS, THEREFORE, IS ALSO USED. OUR TYPICAL BLEND CALLS FOR 25 PERCENT LOW VOL AND 75 PERCENT HIGH VOL.

HIGH VOL COAL

IN 1989, CLAIRTON WORKS CONSUMED APPROXIMATELY 4.2 MILLION NET TONS OF HIGH VOL COAL. HIGH VOL COAL FOR CLAIRTON WORKS IS PRESENTLY RECEIVED FROM A VARIETY OF SOURCES, THREE ON THE MON RIVER IN PENNSYLVANIA PROVIDING 3.6 MILLION TONS, WITH THE BALANCE ORIGINATING IN WEST VIRGINIA AND VIRGINIA. THE TWO LARGEST SUPPLIERS ARE:

MAPLE CREEK

USS MINING CO. INC. (USM) OPERATES THE MAPLE CREEK MINE AND PREPARATION PLANT WHICH ARE LOCATED AT NEW EAGLE, PA, MILE POINT 31 ON THE MON VALLEY IN THE LOCK AND DAM NUMBER 3 POOL. DUE TO THE LOCK SIZE, STANDARD 950-TON BARGES AND STUMBO 1,150-TON BARGES ARE USED IN THIS SERVICE. IN 1989, USS SHIPPED APPROXIMATELY 1.8 MILLION TONS OF HIGH VOL COAL FROM MAPLE CREEK TO CLAIRTON WORKS. USM ALSO ANTICIPATES SHIPPING IN EXCESS OF ONE HALF MILLION TONS OF MAPLE CREEK COAL TO COMMERCIAL ACCOUNTS LOCATED ON THE UPPER OHIO RIVER, SUCH AS SHENANGO LOCATED AT NEVILLE ISLAND, PA.

CONSOL COAL - ROBENA

USS PURCHASED APPROXIMATELY 1.3 MILLION TONS OF HIGH VOL COAL IN "89" FROM CONSOLIDATION COAL'S ROBENA PREPARATION PLANT AT MILE POINT 80 ON THE MON RIVER IN THE MAXWELL POOL. AS WITH USS SHIPMENTS FROM MAPLE CREEK, CONSOL SHIPS ITS COAL TO CLAIRTON WORKS IN STANDARD 950-TON BARGES.

USS ALSO RECEIVES HIGH VOL COAL FROM MINES IN WEST VIRGINIA, SHIPPED THROUGH KENOVA LOCATED AT MILE POINT 312 ON THE OHIO RIVER. OUR 1989 BUSINESS PLAN ANTICIPATES THE MOVEMENT OF 600,000 NET TONS TO CLAIRTON WORKS. STANDARD AND STUMBO BARGES LOADED AT KENOVA MOVE IN 15-BARGE OHIO RIVER TOWS FOR MOVEMENT ON TO CLAIRTON WORKS.

CUMBERLAND

FURTHER UP THE MON RIVER IN THE MAXWELL POOL, AT MILE POINT 81, USM CUMBERLAND MINE PRODUCES AND SHIPS OVER 2.1 MILLION TONS OF COAL PER YEAR. MUCH OF THIS COAL MOVES VIA BARGE FROM CUMBERLAND TO THE UNION RAILROAD'S COAL TRANSFER TERMINAL LOCATED ON THE MON RIVER AT DUQUESNE, PA, MILE POINT 12 IN THE LOCK 2 POOL. THE COAL THEN MOVES VIA RAIL TO UTILITY PLANTS IN THE NORTHEAST OR TO CONNEAUT, OH, WHERE IT IS LOADED ABOARD LAKE VESSELS FOR MOVEMENT TO ITS FINAL DESTINATION. USM HAS ALSO RECENTLY BEEN SHIPPING LARGE VOLUMES OF COAL FOR EXPORT MOVING BY BARGE TO NEW ORLEANS.

LOW VOL COAL

PINNACLE

PENNSYLVANIA SOURCES OF LOW VOL MET COAL HAVE BEEN LIMITED. USS, THEREFORE, RECEIVES ITS LOW VOL COAL FROM SOUTHWESTERN WEST VIRGINIA NEAR BLUEFIELD. COAL IS MOVED VIA RAIL 140 MILES TO KENOVA, WV AT MILE POINT 312 IN THE GREENUP POOL OF THE OHIO RIVER. IT IS THEN TRANSFERRED INTO JUMBO 1,500-TON BARGES FOR MOVEMENT TO CLAIRTON WORKS. 1989 LOW VOL COAL CONSUMPTION AT CLAIRTON WORKS WAS OVER 1.5 MILLION TONS.

THE LONG-TERM VIABILITY OF CLAIRTON WORKS AS THE COKE SOURCE FOR USS AND USS-AFFILIATED MILLS LOCATED IN THE EAST AND SOUTH, TO A GREAT EXTENT DEPENDS UPON NOT ONLY THE ECONOMICS OF RIVER

TRANSPORTATION, BUT DEPENDABLE TRANSIT TIMES THAT CAN ONLY BE ACHIEVED THROUGH AN ONGOING COMMITMENT TOWARDS MAINTAINING AND IMPROVING LOCK AND DAM FACILITIES ON THE UPPER RIVER SYSTEMS OF THE OHIO AND MON RIVERS.

TO CITE ONE EXAMPLE OF THE IMPORTANCE OF DEPENDABLE RIVER TRANSIT TIMES, PERHAPS PREDICTABLE TRANSIT TIMES IS A MORE ACCURATE TERM, ONE MUST LOOK AT THE EFFORTS THAT USS HAS EMPLOYED IN ITS RELENTLESS EFFORT TO IMPROVE ITS COMPETITIVENESS IN THE WORLD STEEL MARKET OF EXCESS CAPACITY.

I AM CERTAIN THAT YOU ALL ARE FAMILIAR WITH THE CONCEPT OF "JUST IN TIME" INVENTORY COST CONTROL. ALTHOUGH IT IS MORE COMMONLY ASSOCIATED WITH THE AUTOMOTIVE INDUSTRY, WE TOO HAVE HAD TO INCORPORATE THE "JUST IN TIME" CONCEPT TO IMPROVE COAL, COKE, AND ORE INVENTORY CARRYING COSTS. IN PAST YEARS, IT WAS NOT UNUSUAL TO MAINTAIN 60 TO 90-DAY SAFETY STOCKS OF COAL AND OTHER RAW MATERIALS AT MILL LOCATIONS. WE CAN NO LONGER AFFORD SUCH A LUXURY. TODAY, OUR INVENTORY COAL IS PEGGED AT 15 DAYS' SUPPLY. THIS INCLUDES NOT ONLY SAFETY STOCKS AT PLANT LOCATIONS, BUT ALSO ALL INVENTORY IN THE TRANSPORTATION PIPELINE.

REGARDING LOW VOL COAL FROM PINNACLE, WV WITH AN AVERAGE TRANSIT TIME OF TEN DAYS FROM PREPARATION PLANT TO CLAIRTON WORKS, INVOLVING 3 DAYS ON RAIL, 2 DAYS AT THE TRANSFER TERMINALS, AND 5 DAYS ON THE RIVER, YOU CAN SEE THAT 2/3 OF OUR INVENTORY IS IN THE PIPELINE. ANY INTERRUPTION IN TRANSIT TIMES WOULD RESULT IN

SIGNIFICANT FREIGHT COST PENALTIES TO MOVE COAL TO CLAIRTON VIA DIRECT RAIL.

NO BARGE - NO CLAIRTON WORKS

THERE IS NO QUESTION THAT FREQUENT TRANSIT TIME DELAYS RELATING TO NAVIGATION ON THE OHIO AND MON RIVERS COULD RESULT IN A RECONSIDERATION OF CLAIRTON WORKS AS THE COKE SOURCE FOR OUR EASTERN AND SOUTHERN MILLS AND WOULD CERTAINLY PLACE THE WORK FORCE OF APPROXIMATELY 2,000 IN JEOPARDY.

TRANSPORTATION COST INCREASES ASSOCIATED WITH THE BARGE TO RAIL DIVERSION OF ALL HIGH VOL COAL AND LOW VOL COAL TO CLAIRTON WORKS WOULD APPROACH $20 MILLION PER YEAR. CLAIRTON WORKS WOULD ALSO BE FACED WITH MAJOR CAPITAL EXPENDITURES TO CONSTRUCT HIGH-CAPACITY RAIL CAR UNLOADING FACILITIES. FACED WITH THESE EXPENSES, IT WOULD LIKELY BE MORE COST EFFECTIVE FOR THE CORPORATION TO LOOK TO OFF-SHORE SOURCES OF COKE SUPPLY FOR ITS EASTERN AND SOUTHERN IRON-PRODUCING FACILITIES.

OTHER RAW MATERIALS TO MON VALLEY WORKS

STEAM COAL

IN ADDITION TO METALLURGICAL COAL, CLAIRTON ALSO CONSUMES OVER 40,500 TONS OF STEAM COAL EACH YEAR, RECEIVED FROM VARIOUS MINES IN SOUTHWESTERN WEST VIRGINIA AND EASTERN KENTUCKY. THIS COAL IS

MOVED VIA RAIL TO TERMINALS IN GHENT, KY, MILE POINT 535 IN THE MCALPINE POOL OF THE OHIO; MAYSVILLE, KY, MILE POINT 406 IN THE MELDAHL POOL OF THE OHIO; AND CEREDO, WV, MILE POINT 314 IN THE GREENUP POOL OF THE OHIO RIVER, THEN VIA BARGE TO CLAIRTON.

ALLOYING AGENTS

IN ADDITION TO ORE, SEVERAL ALLOYS USED IN THE BASIC OXYGEN STEEL MAKING PROCESS ARE RECEIVED THROUGH GULF PORTS, AT WHICH POINT THEY ARE TRANSFERRED TO BARGE FOR MOVEMENT TO USS/KOBE AND MON VALLEY WORKS. MATERIALS DESTINED TO USS/KOBE ARE TRANSFERRED TO TRUCK AT TERMINALS LOCATED IN LIVERPOOL, OH.

THE FOLLOWING VOLUMES ARE ANTICIPATED TO BE CONSUMED AT LORAIN AND MON VALLEY WORKS IN 1989:

FERRO MANGANESE	-	18,000 NT
MANGANESE ORE	-	5,000 NT
HI CARBON CHROME	-	4,500 NT
FERRO SILICA	-	4,500 NT

STEEL BARGE SHIPMENTS

BARGE ASSUMES AN IMPORTANT ROLE IN THE OUTBOUND MOVEMENT OF FINISHED STEEL SHIPMENTS ORIGINATING FROM MON VALLEY WORKS ON THE MON RIVER, WITH 90,000 NET TONS SHIPPED IN 1988. THIS REPRESENTS 7% OF ALL STEEL TONNAGE ORIGINATING FROM MON VALLEY WORKS VIA ALL

MODES. IN 1989, MON VALLEY WORKS SHIPPED 100,000 TONS VIA BARGE WHICH WILL REPRESENT APPROXIMATELY 9% OF THIS YEAR'S TOTAL STEEL SHIPMENTS FROM THE MON VALLEY WORKS.

OUR MOST SIGNIFICANT BARGE MOVEMENTS OF STEEL PRODUCTS FROM THE PITTSBURGH DISTRICT INVOLVES CUT LENGTH AND COILED SHEETS VIA THE PORTS OF LOUISVILLE AND CHATTANOOGA, TN MOVING IN ROLL TOP COVERED EQUIPMENT. CONSIDERABLE TONNAGE MOVED VIA THIS ROUTE. IN ADDITION TO REDUCED FREIGHT COSTS, BARGE HAS BEEN THE PREFERRED MODE TO APPLIANCE PARK BECAUSE OF THE NEGLIGIBLE IN-TRANSIT DAMAGE AND CONDENSATION-RELATED CORROSION EXPERIENCED.

ARISTECH

ARITECH CHEMICALS CORPORATION, FORMERLY USS CHEMICALS DIVISION OF UNITED STATES STEEL, IS ALSO AN IMPORTANT CUSTOMER OF THE BARGE INDUSTRY, USING DEDICATED TANK BARGE EQUIPMENT TO ORIGINATE OR TERMINATE OVER 921,000 NET TONS OF CHEMICAL FEEDSTOCKS OR FINISHED PRODUCTS FOR TWO CHEMICAL FACILITIES ON THE OHIO RIVER AND ONE ON THE MON RIVER.

HAVERHILL, OH

ARISTECH'S HAVERHILL, OH FACILITY, LOCATED AT MILE POINT 336.5 IN THE GREENUP POOL OF THE OHIO RIVER, PRODUCES VARIOUS COMMODITY CHEMICALS, INCLUDING ANILINE, ACETONE, ALPHA METHYL STYRENE, BISPHENOL-A, AND PHENOL. THIS PLANT RECEIVED 475,000 NET TONS OF

CUMENE VIA BARGE AND SHIPS 148,000 NET TONS OF ACETONE AND 8,000 NET TONS OF ALPHA METHYL STYRENE VIA BARGE.

NEVILLE ISLAND

ARISTECH'S NEVILLE ISLAND FACILITY, LOCATED AT MILE POINT 5 IN THE EMSWORTH POOL OF THE OHIO RIVER, PRODUCES MALEIC ANHYDRIDE, PLASTICIZERS AND POLYESTER RESINS. PRINCIPLE BARGE RECEIPTS INCLUDE 82,600 NET TONS OF ALCOHOLS AND 13,500 NET TONS OF STYRENE FROM THE GULF. BARGE SHIPMENTS INCLUDE 11,200 NET TONS OF PLASTICIZERS.

TARBEN (CLAIRTON CHEMICALS)

ARISTECH'S TARBEN FACILITY, LOCATED AT CLAIRTON WORKS MILE POINT 20 IN THE LOCK 2 POOL OF THE MON RIVER, PRODUCES CREOSOTE AND ELECTRODE BINDER PITCH SHIPPING IN BARGES TO POINTS ON THE OHIO, ILLINOIS, AND MISSISSIPPI RIVERS.

DIVERSION OF ARISTECH'S BARGE TRAFFIC TO RAIL WOULD HAVE A DISASTROUS EFFECT UPON THEIR FUTURE PROFITABILITY. FREIGHT COSTS WOULD INCREASE SUBSTANTIALLY. FURTHERMORE, THE COST OF PURCHASING THE 300 RAIL TANK CARS NEEDED TO TRANSPORT THESE CHEMICAL FEEDSTOCKS WOULD BE IN EXCESS OF $15 MILLION.

STATEMENT OF MICHAEL J. TOOHEY
BEFORE THE SUBCOMMITTEE ON WATER RESOURCES,
TRANSPORTATION AND INFRASTRUCTURE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
U. S. SENATE
MARCH 7, 1990

Mr. Chairman, and members of the Subcommittee, I appreciate the opportunity to appear today in support of authorizations for inland waterway projects.

As you may know, Ashland Oil, Inc. is a diversified energy company with operations in petroleum refining, transportation and wholesale marketing; retail gasoline marketing; motor oil and lubricant marketing; chemicals; construction; engineering; and oil and gas exploration and production. Ashland also has equity positions in Ashland Coal, Inc. and Arch Mineral Corporation. Based in Ashland, Kentucky, the company employs 37,800 people worldwide and is one of the largest industrial corporations in America.

The most treacherous section of the Ohio river to navigate is in the area of the Falls of the Ohio, near Louisville, Kentucky. The construction of the McAlpine Lock and Dam enabled tows to pass the Falls but it is still today difficult to transverse this section of the Ohio river. The McAlpine replacement project will not only improve navigation safety, but also greatly ease the congestion on this segment of the waterway.

As you have already heard in the testimony that preceded me, delays at this facility are costing our economy and these delays are expected to worsen.

As a major user of the inland waterways Ashland strongly supports upgrading the locks at McAlpine with an additional 1200 foot lock and we will contribute to the cost of the project through the inland waterway fuel tax.

We are mindful that the Chief of Engineers has not issued his final report on this project. However, if as expected, the report is finalized this summer and the subcommittee has not acted on the authorization, then there can be no action taken for two years on this vital project. We urge the Members of this Subcommittee to include the McAlpine authorization in this year's initiative so that work can proceed expeditiously and in a timely fashion.

Thank you for your consideration.

STATEMENT

BY

ROY M. GRAY

ASSISTANT TO THE CHIEF

SOIL CONSERVATION SERVICE

U.S. DEPARTMENT OF AGRICULTURE

BEFORE THE

UNITED STATES SENATE

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

SUBCOMMITTEE ON WATER RESOURCES,

TRANSPORTATION AND INFRASTRUCTURE

ON

THURSDAY, APRIL 19, 1990

Mr. Chairman, I am pleased to appear before your committee today to support the South Fork of Little River Watershed Project in Kentucky. With me today is Mr. Karl F. Otte of our Watershed Projects Division. Following this testimony, we will be available to answer any questions you may have.

Watershed projects are are initiated by local units of government and other sponsoring organizations. They are developed by teams that cooperate with local conservation districts, county governments, and other local entities. Local steering committees are generally formed to give guidance to the planners, help establish planning objectives and priorities, and help select the final plan. The Governors of each state review the project applications to assure their consistency with state plans and programs. Local governments provide land rights, secure necessary construction permits, pay a share of construction costs that varies depending on the purposes served by the project, and perform needed operation and maintenance.

The South Fork of Little River Watershed plan was prepared in accordance with the Watershed Protection and Flood Prevention Act of 1954, Public Law 83-566. Under this Act, we are giving the highest priority to planning and approving projects that emphasize flood prevention, erosion control, water quality improvement, and water conservation. The recommended plan for South Fork of Little River includes a multiple-purpose structure to provide floodwater storage and municipal and industrial water supply. The ongoing land treatment programs consistent with the 1985 Food Security Act will be continued to reduce erosion and sedimentation.

The South Fork of Little River Watershed is located in Christian and Todd Counties in Kentucky and is 42,800 acres in size. The city of Hopkinsville with a population of 27,864 is the county seat of Christian County. Crofton, Pembroke, and the Fort Campbell military base are other populated areas in the watershed.

The South Fork of Little River originates near the Christian-Todd county line and flows west 12 miles to Hopkinsville. The stream then flows about three miles through residential and commercial areas in the southeastern section of the city and finally joins the North Fork about four miles from the Hopkinsville city limit.

Floodwaters from South Fork of Little River cause significant agricultural and urban damages. Average annual damages in the 2,000 acre floodplain are estimated to be $192,760. There are 227 residential, commercial, or industrial properties that are damaged by flooding. Of these, 137 residences and businesses suffer first floor damages from the 100-year frequency flood. In addition, many residences in the lower and middle sections of the floodplain are subject to even smaller, more frequent floods.

Current water supplies for the city of Hopkinsville are provided by two reservoirs and a rock quarry on the North Fork of Little River (2,694 acre-feet) and are supplemented by the base flow of the river. The present daily use almost equals the daily capacity of current water supplies. The Hopkinsville Sewage and Water Commission projects the need for an additional 5,243 acre-feet of water to meet future needs.

The principal project measure for the South Fork of Little River Watershed consists of one multiple-purpose structure to provide floodwater storage and municipal and industrial water supply. Installation of the structure will reduce floodwater and sediment damages to 1,700 acres of agricultural flood plain, 227 residential, commercial, or industrial properties, 11 bridges, and 7 miles of roads.

The plan calls for the works of improvement to be installed over a three-year period. The sponsor will secure easements and rights-of-way during the first and second years, and construction will begin in the third year. Estimated cost for the project is $3,394,600 of which $868,230 or 25.6 percent will be paid from Public Law 83-566 funds. The federal government will pay 100 percent of the cost for flood prevention, and the sponsors will pay 100 percent of the cost for municipal and industrial water supply. The expense for possible relocation of two farm residences and one farm operation will be shared by the sponsors and the federal government at 74.4 and 25.6 percent respectively. Average annualized benefits are estimated at $363,578 and average annualized costs are estimated at $254,215. The benefit-cost ratio is 1.42:1.

Mr. Chairman, with that, I will conclude my remarks and answer any questions you or committee members may have.

TESTIMONY BY REP. DEAN A. GALLO
NEW JERSEY, 11TH DISTRICT
BEFORE THE SENATE SUBCOMMITTEE ON WATER RESOURCES
TRANSPORTATION AND INFRASTRUCTURE
THURSDAY, APRIL 19, 1990

IN SUPPORT OF AUTHORIZING THE POMPTON/PASSAIC RIVER DUAL INLET TUNNEL DIVERSION PROJECT TO PROVIDE FLOOD PROTECTION IN THE BASIN

MR. CHAIRMAN: I thank the Gentleman from New York, Senator Moynihan, for this opportunity to submit testimony about the critical importance of the Passaic River Dual Inlet Tunnel Diversion Project which is designed to end the devastation caused by flooding in the Passaic River Basin of New Jersey. I would also like to thank my fellow colleagues from New Jersey, Congressman Bob Roe, and Congressman Bob Torricelli for their continued support and efforts on this important Project.

The Passaic River Tunnel Project is a multi-year effort that now is ready to receive the next step in a series of Congressional actions authorizing construction.

I commend the Bush Administration for its recommendation and endorsement that this 879 million dollar Project be given top priority and I urge the members of this subcommittee to make it an integral part in the Water Resources Development Act of 1990.

My purpose today is to share with you some of the history of the problem and to lend my support to a project that could very well be our last and only hope for a solution before the ultimate disaster occurs -- as eventually it will.

The Passaic River Basin has been recognized as being one of the most serious flood problems on the East Coast. The Basin contains some of the most densely developed metropolitan area in the country. The development of its floodplain, due to heavy residential and industrial growth, and its location in the East Coast stormbelt has led to a history of severe hardship during flooding.

Since records have been kept, there have been 19 major floods in the Passaic River Basin. Half of these occurred before 1960 and the other half during the last 30 years. The Lower Basin has been declared a Federal Disaster Area 7 times in the last 20 years.

The worst flood, which is still considered the flood of record in most of the Basin, occurred in 1903. If that record flood were to happen today, it would result in billions of dollars in damage.

Today, with state-of-the-art warning devices in place, we can be assured of an earlier warning. However, we would still face greater overall devastation than we would have from previous floods, because there has been an increase of 2.4 million people living in the area.

You only have to look at the flood of 1984 to understand the devastation that takes place in the Basin. The 1984 flood damaged some 6,400 properties at a loss of 355 million dollars. Homes were under 9 feet of water, more than 9,000 people were evacuated, four lives were lost and nearly 4,000 homes suffered a long-term loss of utility service.

Since that flood, we have redoubled our efforts to begin the construction of the Tunnel Project and to protect the public health and safety of the residents.

I am satisfied that the Army Corps has chosen the only viable solution. The recent approval of the Feasibility Report and Environmental Impact Statement for the Main Stem Passaic River by the Chief of Engineers provides additional proof that the plan is the appropriate response to solve the flooding problems of the Passaic River Basin.

The comprehensive Passaic River Tunnel Project, which includes the acquisition for preservation of 5,350 acres of wetlands and 5.9 miles of channel modifications, incorporates a state-of-the-art concept -- the construction of a 13.5 mile underground water diversion tunnel and a 1.2 mile spur tunnel. These tunnels would take water from the middle of the Basin during high water bypass natural and immovable surface barriers that have always prevented the safe flow of flood waters and allow the water to empty into a safe area. Also, the retirement and preservation of more than 5,000 acres of wetlands would replenish the underground aquifer and provide for the necessary natural storage areas for water within the Central Passaic Basin.

This plan is the result of an exhaustive review by the Corps of all possible options. The State of New Jersey has been directly involved in the planning of this project and in 1984 endorsed the selection of the tunnel plan from among a broad range of alternatives. Since 1981, the New Jersey Department of Environmental Protection has been on record as offering to act as the non-federal sponsor for the project.

In addition, the flood control plan, including the tunnel construction, has the support of most of the residents of the Passaic River Basin, who have seen what this river can do and want to prevent the devastation that is possible in the future.

You may hear from individuals that oppose the Passaic River Tunnel Project and instead favor a partial buyout alternative. This alternative exemplifies the proverbial comparison of apples and oranges. We are not just talking about single family houses that would have to be bought out and relocated. This area also includes numerous commercial, industrial, and public facilities. Some of the houses and owners have been in this area for over 60 years and they would find it very difficult to accept a routine government offer to leave their homes, communities, families and jobs.

Moreover, due to the large amount of land effected by flooding and the high cost of real estate in Northern New Jersey, such an alternative would prove to be more expensive than the recommended plan. A floodplain buyout plan at a comparable level of protection would cost more than 4.2 billion dollars, far in excess of tunnel construction costs.

Most of the remaining concerns with the construction of the flood diversion tunnel involve its terminus. There are some government officials who oppose the project solely because of the placement of the terminus. For the record, I wish to once again state my commitment to moving the terminus point to ensure safe water flow into Newark Bay. I believe that this is the best way to address the remaining concerns and by doing this should attract additional support for this critical project.

This project is more than construction of a tunnel, but the tunnel is the center piece of flood control efforts and the only real hope we have to avoid future disasters.

It is a good solution and I urge my colleagues on the Subcommittee to take the required Congressional action and authorize this worthy project. It is time to stand firm on the urgent need for flood control in the Passaic River Basin.

Thank you, Mr. Chairman, for your time and I look forward to your support.

April 19, 1990

DELAWARE US ROUTE 13 RELIEF ROUTE
BRIDGE
OVER THE FEDERAL CHESAPEAKE AND DELAWARE CANAL

TESTIMONY OF KERMIT JUSTICE
SECRETARY OF TRANSPORTATION, STATE OF DELAWARE
BEFORE
THE SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION, AND INFRASTRUCTURE
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE

Mr. Chairman and members of the subcommittee, this testimony presents the views of the government of the State of Delaware regarding the responsibility for providing public highway bridges over the federal Chesapeake and Delaware canal in general, and specifically for a new bridge needed now to carry the traffic of the US Route 13 Relief Route now under construction by my department at an estimated cost of $400 million in State funds.

As you know, the Chesapeake and Delaware Canal cuts completely across the DelMarVa Peninsula, severing Delaware border to border.

The Delaware Department of Transportation is now constructing a limited access highway to carry the traffic of the presently overloaded US Route 13, the main north-south traffic corridor in Delaware, and indeed in the three-state DelMarVa Peninsula. This highway has been planned and sited under Federal Highway Administration procedures, and the final EIS for the project, including the bridge, was filed and approved by the FHWA in 1987, with the US Army Corps of Engineers and the US Environmental Protection Agency as cooperating agencies.

The present US Route 13 bridge over the C&D canal at St. George's Delaware, built 50 years ago by the Corps of Engineers, is incapable of being modified to carry the traffic in this corridor.

The Delaware Department of Transportation has designed a new bridge to US Department of Transportation and Corps of Engineers standards. The bridge and necessary approaches will cost $111.5 million.

We were surprised last year to find that the Corps of Engineers had made no provision to budget for construction of the bridge, nor had they acquainted the Congress with the need for it.

Recognizing the press of time, schedule, and pressure on the Federal budget, the State of Delaware has offered to finance and build the bridge ourselves and lease it to the Corps on completion at a rent to recover our cost of construction, debt service, and operation and maintenance.

Though this postpones first Federal outlays until FY 1994 or 1995, we do need this year a Federal commitment to make those lease payments or we fear the Corps may not meet its obligation.

Indeed the Corps has advanced the argument that they have no obligation to provide public highway bridges over the C&D Canal despite having done so for 70 years under the leadership of this Committee.

Our discussions in Washington over the last year have made it clear to us that leadership by this Committee is critical to Federal action on this vital issue.

Therefore, the State of Delaware is asking this Committee to contribute through legislation that:

- restates the intent of the Federal Government to meet its responsibility to the people of Delaware to build and maintain good and sufficient bridges over the C&D canal, at no cost to the State, to meet the needs of public highway traffic, and
- restates that the army Corps of Engineers has the necessary authority to provide such bridges, including the new US Route 13 Relief Route bridge.

Attached is a draft of the legislation we would suggest, with explanatory material.

The State of Delaware believes that the Federal Government is responsible for providing bridges over the C&D Canal for reasons of legal history, equity, and good faith. Let me outline those reasons briefly.

Legal history: The first C&D canal was built by a private company chartered and franchised by specific laws of Delaware and Maryland. Recognizing that the canal would cut Delaware completely in two, border to border, the State law required the company to provide, without cost to the state, good and sufficient bridges to enable public road traffic to cross the canal without inconvenience.

In the charter law, the State reserved the right to enact laws regarding bridges that would be binding on the company.

In 1919, pursuant to Federal law, the Federal Government acquired the rights, property, and franchises of the company. The franchise included the obligation to the State of Delaware to provide bridges. The Federal Government was not authorized to, nor did it, acquire from the State a release from that obligation. In effect, the Federal Government acquired the canal, the contract of the canal company with the State of Delaware, and the contractual obligation of the company to provide bridges over the canal for the Delaware public roads.

For 70 years, under the leadership of this Committee, the Federal Government has met that obligation to provide good and sufficient public highway bridges over the C&D canal. Legislation reported by this Committee has repeatedly acted upon it by providing additional bridge capacity, and by requiring waivers of the obligation if alternative amenities were provided in lieu of bridges.

Only in the last year has the Corps of Engineers attempted to deny that the obligation exists.

The State of Delaware indeed believes that the Federal obligation remains. I would like to submit for the record supporting documentation prepared by the Delaware Attorney General and by the Senate Judiciary Committee.

Equity: The C&D Canal was taken over and enlarged by the Federal Government to provide national economic benefits and to improve the national security. Though Delaware shares in the general national security benefit, almost none of the economic benefits accrue in Delaware. Indeed, the primary function of the C&D canal is to provide a shortcut for ocean and coastal shipping through Delaware Bay to the port of Baltimore, Maryland.

In order to provide for navigation, bridges over the C&D Canal are now required to provide a clear span across a 450 foot wide channel, and to be at least 140 feet above the water. Site selection for new bridges, that ultimately determines the cost of approaches, is governed by Federal highway planning and environmental law.

The Route 13 bridge and approaches, designed and sited to Federal standards, will cost $111.5 Million.

It would not be equitable for the Federal Government to require Delaware to pay the high cost of connecting its highways across this canal - that was originally fast land requiring no bridges at all - in order to provide national economic benefits that accrue almost entirely out of State.

Good faith: The arrangement between the Federal Government and the State of Delaware was entered into voluntarily and in good faith by both parties. The State of Delaware consented by law to the Federal acquisition of the canal with the understanding that good and sufficient bridges would be provided at no cost to the State. The record indicates that the Federal Government shared that understanding at the time of takeover.

The recognition of that obligation is documented in the legal reports submitted for the record. Under legislation reported by this committee, C&D canal bridges have in fact been replaced with added traffic capacity at three locations in Delaware.

The Federal Government has recognized and met its contractual obligation to the State of Delaware for the past 70 years.

Maintaining good faith with the State requires that the Federal Government not unilaterally decide that bridges will no longer be a Federal responsibility, and requires that the Federal Government not now claim that such an obligation never did exist - as the Corps of Engineers has attempted to do.

I believe that this Committee, that has legislative jurisdiction over the C&D canal,

- does recognize the Federal obligation to the State of Delaware,
- never intended to place this huge obstacle across all north-south highways in Delaware without making provision for necessary bridges,
- and will not want the Federal Government to break faith with the State of Delaware

I hope you will help to set the record straight with appropriate legislation as the State requests.

As you consider this legislation, the question may arise as to the future implications of the historical commitment that it recognizes. There are indeed very real limitations to the Federal financial implications.

The major limitation is a practical one. Any new bridge capacity must be preceded by major investment by the State in highway development. In the present case, Delaware is putting up $400 million in highway investment.

There is only one other possible C&D Canal crossing in Delaware that may require added capacity - the present Summit

There is only one other possible C&D Canal crossing in Delaware that may require added capacity - the present Summit Bridge area. That crossing would need to be expanded only (and I repeat only) if massive new highway development is undertaken by both Maryland and Delaware in the direct corridor connecting the Delaware Bay Bridge and the Chesapeake Bay Bridge. No other public highway corridors across the Canal show the possibility of being economically justified in the foreseeable future.

The draft offers one legal limitation that does not now exist. That is that any State determination of needed bridge capacity must be based on the results of planning done under Federal Highway Administration planning procedures that, of course, incorporate Federal environmental law. We include that to demonstrate that Delaware has no intention of being arbitrary in demanding bridges.

I point out in closing that this is an urgent matter. Our traffic projections, prepared under Federal Highway Administration procedures, indicate that the present Route 13 bridge will be overloaded by 1994. It carries 33% of the total traffic flow in and out of the Peninsula, and 60% of the traffic across the C&D canal. It carries as much traffic per lane as the Chesapeake Bay Bridge at Annapolis. The State has already begun building the Relief Route. If traffic demands and the Relief Route construction schedule are to be met, construction of the new bridge must begin before the end of this calendar year.

Thank you.

Kermit Justice,
Secretary of
Transportation,
State of Delaware

Attachments:

A. Proposed Authorization Language
B. The need for Federal Funding, Jan. 29th, 1990
C. Legal Documentation (With original only)
  - Senate Judiciary Committee Memoranda, June 20, 1989; Nov. 9, 1989; and February 2, 1990.
  - Delaware Attorney General Memoranda, Nov 16, 1989, and February 22, 1990.

ATTACHMENT A

April 19, 1990

PROPOSED LEGISLATION AUTHORIZING THE US ARMY CORPS OF ENGINEERS TO MEET THE OBLIGATION OF THE UNITED STATES TO PROVIDE PUBLIC HIGHWAY BRIDGES OVER THE CHESAPEAKE AND DELAWARE CANAL AT NO COST TO THE STATE OF DELAWARE

Bill language: It is the intent of Congress that the United States should continue to meet the obligation to the State of Delaware to provide, at no cost to the State, good and sufficient bridges over the Chesapeake and Delaware Canal to meet the needs of traffic on the Delaware public highways, as determined by the State, **provided that the State's determination is made after considering the results of highway planning procedures approved by the Federal Highway Administration.** The said obligation was part of the franchise of the Chesapeake and Delaware Canal Company previously established in Delaware law, and was assumed by the United States with the acquisition of the property and rights of the Company in 1919.

The Assistant Secretary of the Army for Civil Works, acting through the Chief of the Army Corps of Engineers, is authorized to provide such good and sufficient public highway bridges over the Chesapeake and Delaware Canal through construction or lease of facilities, modification of existing facilities, or such other means as may be mutually agreed upon by the Assistant Secretary and the State of Delaware.

Explanation: This provision restates the intent of the Congress to meet the obligation to the State of Delaware to provide good and sufficient bridges over the Chesapeake and Delaware Canal to meet the needs of traffic on the public highways of Delaware at no cost to the State, and provides permanent authorization to the Corps of Engineers to provide bridges through new construction, lease of facilities, modification of existing facilities, or other means mutually agreed upon by the Assistant Secretary of the Army for Civil Works and the State of Delaware.

It recognizes the right of the State under present law to determine the need for bridges, but conditions the exercise of that determination on the application of highway planning and siting procedures approved by the Federal Highway Administration.

Delaware law established the charter of the C&D Canal Company in 1801 requiring, as a condition of the right to build and operate a navigation canal that cuts the State completely in two, that the Company provide good and sufficient public highway bridges over the canal at no cost to the State, and reserving the right of the State to determine the conditions of compliance.

Pursuant to law, the United States acquired the property and franchises, including the rights and obligations, of the C&D Canal Company in 1919 for the purpose of enlarging the Canal and incorporating it into the Intracoastal Waterway System constructed and operated by the Army Corps of Engineers. Thus, the United States assumed the obligation to provide good and sufficient public highway bridges over the canal at no expense to the State of Delaware.

The present C&D Canal provides access for ocean shipping through Delaware Bay to Baltimore Maryland and other Chesapeake Bay points. It severs land transportation completely across the State of Delaware and the rest of the DelMarVa Peninsula.

To meet the needs of shipping, the United States now requires new highway bridges across the Canal to provide a clear span over a 450 foot wide channel 140 feet above the water. Site selection for new bridges, that ultimately determines the cost of approaches, is controlled by Federally established highway planning and environmental procedures.

For the above reasons, it is appropriate that the Federal Government pay the cost of public highway bridges over the C&D Canal that the State has determined to be needed through the application of highway planning procedures approved by the Federal Highway Administration.

The State of Delaware is now constructing a limited access highway at the cost of $400 million in State funds to meet the expanding traffic needs in the US Route 13 corridor. As an integral part of the Federally approved planning process for the US Route 13 Corridor, the State has also determined the need for a new bridge to carry the traffic over the C&D Canal. The State Transportation Department is prepared to finance and build the new bridge and approaches, estimated to cost $111.5 million, and has offered to lease the new facilities to the Corps of Engineers as a means of recouping the costs of construction, debt service, operation, and maintenance.

This provision recognizes the authority of the Army to lease the bridge to be constructed by the State of Delaware and to construct, modify, lease, or otherwise provide facilities in the future to meet the obligation of the United States to the State of Delaware for public highway crossings over the C&D Canal.

STATEMENT OF

JAMES E. WANAMAKER, CHIEF ENGINEER

BOARD OF MISSISSIPPI LEVEE COMMISSIONERS
GREENVILLE, MISSISSIPPI

TO THE

SENATE SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION AND INFRASTRUCTURE

ON BEHALF OF CHANGES

TO THE

ABILITY-TO-PAY CRITERIA

FOR

FLOOD CONTROL PROJECTS

BOARD OF
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CHARLES S. TINDALL III, ATTORNEY
DORIS L. LEACH, TREASURER
POLLY W. PRITCHETT, SECRETARY

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I am James E. Wanamaker, Chief Engineer, Board of Mississippi Levee Commissioners, Greenville, Mississippi, and I have the privilege of presenting this statement on behalf of that Board and the citizens of this levee district comprising the counties of Bolivar, Washington, Sharkey, Issaquena, Humphreys and Warren in the lower Yazoo Basin in Mississippi.

The Mississippi Delta region is one of the poorest regions in the United States. This is pointed out in the Interim Report of the Lower Mississippi Delta Development Commission. Sharkey and Issaquena Counties in our levee district are included among the ten counties with the lowest per capita income in the Delta region, and have an unemployment rate that exceeds twenty-four per cent.

The residents of our levee district have, for over sixty years, provided and will continue to provide the local share of numerous flood control projects. We provide rights-of-way and operation and maintenance of one hundred eighty-five miles of Main line Mississippi River levees; along with operation and maintenance of twenty-eight miles of Yazoo Backwater levees, and over three hundred miles of channels on the Big Sunflower and Tributaries System.

During our review of the Budget Request submitted by the Department of the Army to the Congress for the Appropriation for Flood Control Mississippi River and Tributaries Project for Fiscal Year 1991, the absence of many projects included in prior requests was frightening. These much-needed projects previously supported by this committee and the Congress were no longer being included in the Department of the Army's request.

In almost every case, the records of the Corps of Engineers indicate "Lack of Local Cooperation" as the reason for the omission. In reality, the reason should have been "Inability to Pay Under Present Cost-Sharing Criteria."

The assumption by the Executive Department that even the poorest communities can afford to pay at least twenty-five per cent of a flood control project has denied the residents of the Lower Mississippi Valley much needed and long-awaited protection. During debate prior to passage of the Water Resources Development Act of 1986, concern was expressed that much needed projects would be denied the poorer regions as a result of these cost sharing provisions. Section 103 of the Act was supposed to protect against these concerns.

The procedure developed by the Executive Department to determine the ability to pay utilizes the benefit to cost ratio of a project as a first step in determining the percentage of local cost sharing requirements. The benefit to cost ratio of a project has no relationship as to the ability of an area to pay for these projects. Many of the benefits used are accrued by the Federal Government, or areas outside the boundaries of the sponsoring agency. Other items on the benefit side of the computation involve reduction of losses and do nothing to produce cash flow into the economy of the area.

The factors used in computing the second step of the formula used by the Executive Department utilize per capita income of the counties and state, as a measure of the ability of the area to pay.

For this reason, we ask that language be placed in the 1990 Water Resources Act that would direct that the determination of the ability to pay the non-federal portion of flood control projects be based on the economic condition of the community.

We are grateful for the consideration given to us by the committee and appreciate the opportunity to present our concerns to you at this time.

BARRY L. MAXWELL, PRESIDENT
REYNOLD S. MINSKY, VICE-PRESIDENT
BERKELEY MORLEY, SECRETARY

OFFICE OF
FIFTH LOUISIANA LEVEE DISTRICT
BOARD OF COMMISSIONERS
TALLULAH, LOUISIANA 71282

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STATEMENT OF FIFTH LOUISIANA LEVEE DISTRICT
TALLULAH, LOUISIANA

TO THE

SENATE SUB-COMMITTEE ON WATER RESOURCES
TRANSPORTATION AND INFRASTRUCTURE

ON BEHALF OF CHANGES
TO THE
ABILITY-TO-PAY CRITERIA
FOR
FLOOD CONTROL PROJECTS

TELEPHONE (318) 574-2206

STATEMENT OF
FIFTH LOUISIANA LEVEE DISTRICT

Boards of Commissioners of levee districts are in general responsible for the obtaining of flood protection works and appurtenant structures through cooperative effort with Local, State and Federal agencies having jurisdiction over or interest in such matters, and the maintenance, operation and policing of flood protection levees and appurtenant works.

The Fifth Louisiana Levee District, domiciled at Tallulah, Louisiana, is composed of the Parishes of East Carroll, Madison, Tensas and Concordia, comprising an area of 1,621,000 acres.

The economy of the Louisiana Delta parishes depends primarily on agriculture and related activities. A major problem has been the inadequacy of the drainage outlet provided by Tensas River and tributaries. Many thousands of acres of highly productive agricultural lands in the upper reaches of the Tensas River watershed in Madison and East Carroll Parishes have suffered severe crop losses during the past years due to the inadequacy of upper reaches of this major drainage stream. Improvement of the Mill Bayou - Baryou Vidal portion of the authorized project would afford early drainage relief to approximately 45,000 acres of highly productive agricultural lands in the upper portion of the Mill Bayou - Bayou Vidal watershed.

For years, at public hearings held by the Mississippi River Commission, the Fifth Louisiana Levee District has requested that channel improvement of the remaining portion of the Tensas River above Mile 61 at Newlight be initiated at the earliest possible date and prosecuted at the maximum rate possible; also, that the Mill Bayou - Bayou Vidal portion of the authorized project should be scheduled concurrently with the channel improvement extending to and above the mouth of Mill Bayou.

An evaluation of flooding conditions along the Tensas River, Mill Bayou, Bayou Vidal, and Roundaway-Bayou Vidal Cutoff, Louisiana, by the U. S. Army Corps of Engineers has identified the need for channel enlargement and clearing and snagging improvements. The need to perform these improvements is vital to the well being of area residents and the protection of public and private properties.

The plan of improvements for the Tensas River, Mill Bayou, Bayou Vidal, and Roundaway - Bayou Vidal Cutoff, Louisiana is described in the General Design Memorandum Number 26, entitled "TENSAS RIVER PROJECT, LOUISIANA".

The Tensas River Project represents a continuation of the Corps' efforts under applicable laws and regulations to respond to the needs for flood protection expressed by the residents of the Tensas River area.

The Water Resources Development Act of 1986 (Public Law 99-662) established new cost-sharing requirements for water resource projects. Although the Tensas River project was authorized prior to that Act, the project was identified several years ago as a separable element of the Tensas Basin Project. In addition to project cost-sharing requirements for construction, non-Federal interests would also be responsible for annual operation and maintenance costs for the project plus major replacement or rehabilitation work needed.

The estimated total cost of the proposed Tensas River Project is $67,128,800. It has been designated as a separable element of the Boeuf and Tensas Rivers project and is, therefore, subject to the cost-sharing provisions of the Water Resources Development Act of 1986. (Public Law 99-662). Under these provisions, the Federal cost is estimated to be $50,346,600 and the non-Federal cost as $16,182,200.

Fiscal Year 1991 Budget for the Fifth Louisiana Levee District estimates revenue in the amount of $548,480, expenditures of $586,612, with budgeted deficit of $38,132.

The General Design Memorandum for this project was completed by the Vicksburg District in December, 1988. Although the Fifth Louisiana Levee District has for years pleaded for, and endorses, supports the plan of improvements for the Tensas River, Mill Bayou-Bayou Vidal, and the Roundaway-Bayou Vidal Cutoff, Louisiana, as described in the General Design Memorandum Number 26, entitled "Tensas River Project, Louisiana", it cannot financially sponsor the proposed project. The levee district is advised that further design is delayed until a letter of assurance to cost share the continued design and the construction cost can be obtained from a local sponsor or sponsors.

The Interim Report of the Lower Mississippi Delta Development Commission, compiled October 16, 1989, covering 214 counties and parishes in the Lower Mississippi Delta (Arkansas, Illinois, Kentucky, Louisiana, Mississippi, Missouri, and Tennessee) indicates Madison Parish, Louisiana, one of the parishes within the Fifth Louisiana Levee District which would benefit from construction of the Tensas River Project, ranks second of the "Bottom 25 Delta Counties/Parishes in Terms of Per Capita Income for 1986 (1982 Dollars)". East Carroll Parish, also within the Fifth Louisiana Levee District, and a parish which would benefit from construction of the Tensas River Project, ranks 24th. Excerpt of The Interim Report appears on the next page, Page 3.

PER CAPITA PERSONAL INCOME FOR DELTA REGION AND NATION FOR SELECTED YEARS, (1982 DOLLARS)

	1970	1980	1988
Delta Region	$ 6,907	$ 9,152	$10,192
Nation	$ 9,441	$11,452	$13,577

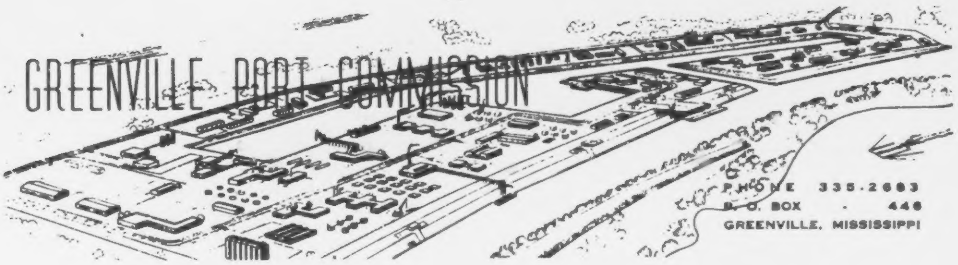
SOURCE: NPA Data Services, Inc.

BOTTOM 25 DELTA COUNTIES/PARISHES IN TERMS OF PER CAPITA INCOME FOR 1986 (1982 DOLLARS)

RANK	COUNTY/PARISH, STATE	PER CAPITA INCOME
1.	Lee, AR	$6,287
2.	Madison, LA	6,305
3.	Jefferson, MS	6,344
4.	Issaquena, MS	6,365
5.	Holmes, MS	6,611
6.	Shannon, MO	6,658
7.	Franklin, LA	6,697
8.	Tunica, MS	6,874
9.	West Carroll, LA	6,914
10.	Sharkey, MS	6,977
11.	Walthall, MS	7,000
12.	Chicot, AR	7,064
13.	Marshall, MS	7,097
14.	St. Helena, LA	7,106
15.	Carroll, MS	7,126
16.	Jefferson Davis, MS	7,243
17.	Quitman, MS	7,244
18.	Carter, MO	7,265
19.	Amite, MS	7,288
20.	Lincoln, AR	7,299
21.	Allen, LA	7,307
22.	Ripley, MO	7,389
23.	Benton, MS	7,404
24.	East Carroll, LA	7,417
25.	Claiborne, MS	7,449

This table was derived from USDA data on per capita income for non metropolitan counties and parishes

The Board of Commissioners for the Fifth Louisiana Levee District respectfully requests that consideration be given to basing computations for the ability-to-pay criteria on actual local economic factors and not on computed benefits.



GREENVILLE PORT COMMISSION
PHONE 335-2683
P. O. BOX - 446
GREENVILLE, MISSISSIPPI

STATEMENT OF THE GREENVILLE PORT COMMISSION, GREENVILLE, MISSISSIPPI
BEFORE THE SENATE SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION
AND INFRASTRUCTURE
APRIL 19, 1990

To the Honorable Senator Daniel P. Moynihan.

On behalf of the Greenville Port Commission of Greenville, Mississippi, and other similarly located ports throughout the Lower Mississippi River region, we earnestly request your consideration and assistance in regard to the ability-to-pay criteria as outlined in the Water Resources Act of 1986. Our port is located in the Mississippi Delta and serves an economically depressed region which is nationally recognized as one of the poorest regions in this great nation. Our salvation will be through the development of economic enterprises which will allow our citizens to share in the American dream. The Greenville Port is such a project and its early phases of development have been completed with excellent results. We hope to complete the next phase and to construct, by hydraulic fill, additional land for industrial development. Current regulations and interpretation of the cost-sharing provisions for such project make it impossible for our Port Commission and our county to participate. A 25 percent requirement of a $60 million project is far beyond our ability to pay, especially when the Port Commission has already expended its funds to acquire the site necessary.

We urge you to adopt cost-sharing criteria or formulas which are based on the actual economic conditions and ability to pay of the supporting organization. This cost sharing in our instance should also include credit for the value of the lands or sites for the project. We also urge you to consider cost sharing for maintenance of any harbor project in a similar fashion. Rivers and harbors are areas where the Corps of Engineers has traditionally performed routine maintenance dredging. This should continue on the same basis as it currently exists without an attempt to create a new portion of navigable waterway on which the required cost of maintenance is to be absorbed locally.

We support the other statements given on behalf of the Lower Mississippi Valley Flood Control Association speakers and thank you for your consideration.

GREENVILLE PORT COMMISSION

STATEMENT OF

L'ANGUILLE RIVER IMPROVEMENT DISTRICT

P.O. BOX 36

CHERRY VALLEY, ARKANSAS 72324

TO THE

SENATE SUBCOMMITTEE ON WATER RESOURCES,

TRANSPORTATION, AND INFRASTRUCTURE

ON BEHALF OF CHANGES

TO THE

ABILITY TO PAY CRITERIA

FOR

FLOOD CONTROL PROJECTS

STATEMENT OF

L'ANGUILLE RIVER IMPROVEMENT DISTRICT

The L'Anguille River Arkansas Project, which is included under the Appropriation Title of "Flood Control, Mississippi River and Tributaries," is located in Northeast Arkansas within the Counties of Poinsett, Cross, Woodruff, St. Francis, and Lee, and was authorized by the Flood Control Act of 30 June 1948. On 21 February 1986 the Mississippi River Commission issued its Record of Decision in approving the Re-evaluation Report of the Memphis District Office Corps of Engineers dated August 1985. The Re-evaluation Report completed the planning process for the L'Anguille River Project, and since 21 February 1986 the detailed engineering studies necessary for project construction have been completed. To date Congress has appropriate $2,611,000 for the L'Anguille River Project.

Funds were appropriated by Congress for the re-evaluation of this Project because of the unique flooding problem which occurs in this River Basin during the late summer and early fall. These floods completely ruin mature crops ready for harvest. This is highly unusual and was alarming when brought to the attention of the Appropriation Subcommittees and Senators Bumpers and Pryor and Congressman Alexander, hence the appropriation of monies for this re-evaluation. Coupled with this problem of late flooding is the fact that the landowners in this River Basin have suffered from the general economic conditions existing in the agricultural economy, and they cannot meet any "ability to pay" criteria in shouldering the non-federal costs of this Project. The Counties of St. Francis and Lee rank in the highest unemployment category of any Counties within the United States--an average ranging from 26% to 30% unemployment.

The L'Anguille River Project was one of the first, if not the first Project, to have equal input from both U. S. Fish & Wildlife Service and the Environmental Protection Agency. Both of these Agencies along with the Corps of Engineers have approved the plan of construction for the Project. It is crucial that Congress recognize the complete cooperation that existed in the re-evaluation of this Project by all Federal Agencies which occurred over an extremely short period of time, but because of the automatic cut-off date of May 1, 1986, construction cannot begin under the present criteria.

The expenditure of taxpayers' funds in getting the Project to this stage would be a tremendous waste if construction is not started immediately. Funding for construction has been appropriated but no construction has started because the sponsor has not been able to execute the Local Cooperation Agreement (LCA) with the Memphis District Office of the Corps of Engineers due to the sponsor's inability to meet the "ability to pay" criteria. Therefore, it is absolutely mandatory that the Secretary of the Army establish procedures to determine the "ability to pay" non-federal costs by a Project's sponsor, and that the artificial assumption that each Project within the United States should assume a minimum of one-fourth of the non-federal costs be changed so that each Project stands on its own under new procedures to determine ability to pay.

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The Little River Drainage District

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Maintenance Supervisor
Secretary/Treasurer

Michael C. Halter
Assistant Secretary
/Treasurer

Harry H. Bock, Attorney
New Madrid, Mo.

April 19, 1990

Senate Subcommittee on Water Resources
Transportation and Infrastructure
Dirksen Senate Office Building
Washington, D. C.

Mr. Chairman and Members of the Committee:

My name is Larry D. Dowdy, Maintenance Supervisor and Secretary-Treasurer for The Little River Drainage District, which is a Circuit Court Drainage District existing under the Statutes of the State of Missouri. Our District was founded in 1907 and has been providing benefits to portions of seven (7) counties in Southeast Missouri, namely Bollinger, Cape Girardeau, Dunklin, New Madrid, Pemiscot, Scott and Stoddard. We have the responsibility of providing flood control and drainage to approximately 2500 landowners of farmland over an area of more than two million acres.

In 1928 Congress enacted a Flood Control Act which addressed problems along the Mississippi River and many of its tributaries beginning at the Gulf of Mexico in Louisiana and extending upstream through the length of the River and along its major tributaries. Congress at that time in the enaction of that Act recognized that flood control and drainage throughout the Mississippi River project area was a national problem in that more than forty percent (40%) of the Continental United States and parts of Canada flowed down the long and winding River. In their wisdom they saw fit to support improvements of the interior drainage and the mainline levees as well as the River itself by making this a national problem and funding it through an annual budgetary process. At that time local interests were led to believe that the project as Congress had intended and as was authorized, would eventually be constructed in most cases at no cost to the local entities or private citizens with some exceptions being that local interest would provide the necessary rights-of-way on some projects.

In 1986 the new Water Resources Act added the element of cost sharing to local interests but also included in that Act was a clause "if the local interest had the ability to pay." At a later date the Secretary of the Army, or his staff persons, determined that any local interest should be able to pay a minimum of twenty-five percent (25%) of any Water Resources project, and maybe even up to as much as fifty percent (50%). We believe this is not and was not intended to be the direction that Congress wanted these projects to go. We have found many projects that have been authorized since 1928 which are in the upper part of the system as well as in the lower part of the project that will not be completed if local interest has to pay anywhere near the minimum of twenty-five percent (25%). In many and most cases where these projects are in danger of going unconstructed, local interest would be unable to pay hardly any percent of the construction monies because of the low tax bases they have and because of the low per capita income area that is involved which makes increases in the tax base prohibitive.

For residents of the area that I live and represent the per capita income ranges from a low of 56.57% to a high of 73.58%. As you can see this average is considerably less than the national average and we only make this statement to point out to you the financial dilemma that always exists and will grow even worse unless some effort is made to improve the drainage and flood control in this area as its very existence depends directly upon good drainage and flood control facilities.

In the last five (5) years our District requested studies for the extension of improvements of works that the Federal Government had authorized for completion and extension which we were told numerous times would be done after completion of the authorized work. After the completion of these studies the proposed new work met a favorable benefit/cost ratio, but local interest could not and would not sign the local cost sharing agreement since it was impossible for them to meet the requirements of a minimum of twenty-five percent (25%) and in all likelihood their share would have exceeded thirty-five percent (35%).

Another aspect of the promises made in the 1928 Act to our area is that we are in the upper part of the authorized project for improvements and it has been necessary for us to wait until works down below were completed in order to not place adverse effects upon those citizens below which we have no problems accepting. However, by having to wait all those years a new twist has been added to the criteria and the ground rules that will now be applied by the Secretary of the Army, and we feel that we are unfairly having to bear the burden of cost sharing when our friends and neighbors downstream have gotten many of their projects completed without any such limitations.

We petition this Committee to look at the interpretation of the Secretary of the Army and to use the 1986 Water Resources Act to the fullest intent of Congress. We do not directly oppose cost sharing in its entirety but we do oppose cost sharing added to projects which local interest does not have the resources to provide its cost sharing and which ultimately could cause that project not to be completed. Basically what will happen and is happening, those areas that could underwrite the entire project themselves will be able to receive the Federal dollars to improve their area and the areas that need it the most and would receive the greatest benfits in improving their welfare, environment and livelihood are not receiving any support at all.

The next facet that I wish to bring to your attention is the fact that all projects, to my knowledge, authorized by Congress in the Mississippi River and Tributaries project were required to get a favorable benefit/cost ratio or the work couldn't be authorized and done. Many of the disasters that will occur in the future and will have many millions of dollars of Federal monies pumped into them throughout the entire Valley, could be avoided if the Mississippi River and Tributaries project could be completed as planned and authorized by Congress in 1928. We support total completion of the projects that meet the favorable cost/benefit ratio in order to prevent any of these disasters from occurring. Finally I would ask this Committee to answer if the cleanup of the oil spill of the Valdez, the relief work of the earthquake in San Francisco, the support that was given for the hurricane that occurred on the East coast in 1989 and most recently the flooding that occurred in Alabama, which was declared a disaster area by President Bush, if those Federal dollars met a benefit/cost ratio, and if they received those monies of assistance by cost sharing? Let me say that we do not object in any way to the Federal government assisting in such disasters, but when we can lessen or prevent some disasters from occurring then we support putting Federal monies in those types of projects at all time.

Respectfully submitted,

Larry D. Dowdy
For Board of Supervisors
The Little River Drainage District

STATEMENT OF JOSEPH F. MOONEY, JR.

CHIEF ENGINEER, YAZOO - MISSISSIPPI DELTA LEVEE BOARD

TO THE

SENATE SUBCOMMITTEE

ON

WATER RESOURCES, TRANSPORTATION, AND INFRASTRUCTURE

April 19, 1990

SUBJECT: Cost Sharing - Water Resources Development Act of 1986

GROUP: Lower Mississippi Valley Flood Control Association

SUMMARY: Support the Association's General Statement

Comments on Cost Sharing in the Yazoo Basin

Appreciation to Congress for Benefits Received

Submitted by:
Yazoo - Mississippi Delta Levee Board
P. O. Box 610
Clarksdale, MS 38614

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

This statement, prepared by Joseph F. Mooney, Jr. of Clarksdale, Mississippi, Chief Engineer for the Yazoo-Mississippi Delta Levee Board, is submitted this April 19, 1990, on behalf of the entire Board and of the citizens of the Yazoo Basin.

As members of the Lower Mississippi Valley Flood Control Association, we fully support the general statement of the association as presented by our spokesman, Mr. Ron Besson. In the years preceding and following the adoption of the Water Resources Development Act of 1986, we carefully noted the assurances of Mr. Robert Dawson (then Asst. Secretary of the Army), Congressional Members, and highly placed officials of the Corps of Engineers stating that cost-sharing provisions would not prevent needed projects from being built in relatively poor communities. We are becoming very concerned that those assurances do not seem to coincide with what is actually happening.

While we know of only one specific case in our Levee District, we have knowledge of several other cases which indicate a need for the re-interpretation of the cost-sharing criteria. The case of the City of West Memphis, Arkansas causes us great concern. To deal with a serious urban flooding problem in West Memphis, the Corps of Engineers developed a multi-million dollar plan which would have required 50% cost-sharing under the applicable rule. The City appealed the percentage because they had recently suffered two disastrous floods and one disastrous tornado, thereby depleting any available public funds for some time to come. The Secretary of the Army subsequently approved a reduction of the cost-sharing rate to 47% which was obviously insufficient relief. That project has not been constructed.

In future years, it is likely that it will become necessary to do work in our District that will become subject to cost-sharing. We wish to be heard on the criteria of cost-sharing at this time to help assure equitable and proper treatment for our area when new works in our District are undertaken.

The Yazoo-Mississippi Delta Levee Board at Clarksdale and the Mississippi Levee Board at Greenville are responsible for flood control protection for the Mississippi Delta, an area some 200 miles long and up to 60 miles wide. The economy of the Delta is based upon agriculture and light industry, and is slowly growing despite some very serious handicaps. Unemployment and underemployment rates are relatively high, but they are yielding very slowly to the best efforts of our community leaders.

Our farmers and businessmen are quite productive, but the fruits of their efforts, particularly their taxes, must sustain our local and state activities for all of our population includes a high proportion of children and elderly who are not in the work force as well as the many unemployed and underemployed who are in the work force. In addition, they are the primary source of the seed capital needed to provide additional jobs for the community. Official economic statistical data indicates that our farmers and small businessmen are being pushed to the limits to provide our most basic needs. It seems counter productive to impose on these same sources for cost-sharing funds if those funds are going to be drained away from providing new jobs and services which would reduce our dependency upon the Federal Government.

In this part of the country, most water resource projects are for flood control. Most of the projects have very favorable benefits to cost ratios because they allow the local people to produce crops, goods, and services without suffering the significant dollar losses due to floods. The prevention of these losses can be and frequently are the difference between "make or break". Imposing cost-sharing at the stated rates without modifying them according to the type of benefits realized by the project and the economic conditions in the area where the project is to be built, seems to be a self-defeating process.

If these projects are not built; production is curtailed, and the local economy suffers. If these projects are built under unmodified cost-sharing; production is normal, income is drained away to cost-sharing, and the local economy suffers. If these projects are built under modified cost-sharing; production is normal, reasonable income is retained after cost-sharing and available for job creation and meeting community needs, and the local economy prospers.

We appreciate the wisdom of the Congress of the United States for making investments in water resources projects, particularly flood control and water management projects. You have helped the American farmer become the world's greatest food producer, feeding not only our nation, but major portions of the rest of the world. You have helped the citizens of the Mississippi Valley to become healthy, secure, productive citizens of our great country. We have come very far, but we still have far to go. Economic statistics and data indicate that we are still a relatively poor area of the nation and are still having difficulty meeting the basic needs of education, nutrition, development and maintenance of infrastructure, and other basic needs. Without a reasonable modification of cost-sharing criteria, our area is not going to be able to afford necessary water resource projects, and our hard won progress in advancing our standard of living and quality of life is likely to be reversed.

We respectfully urge that you recommend the implementation of criteria for cost-sharing that makes appropriate and adequate provisions for areas with limited economic means.

Working for the Nature of Tomorrow®
NATIONAL WILDLIFE FEDERATION
1400 Sixteenth Street, N.W., Washington, D.C. 20036-2266 (202) 797-6800

Testimony of

Edward R. Osann
Director, Water Resources Program
National Wildlife Federation

Regarding

S. 2183 & S. 2469
The Water Resources Development Act of 1990

Submitted to the
Subcommittee on Water Resources,
Transportation, and Infrastructure

Committee on Environment and Public Works
United States Senate

For the Record of the Hearing of April 19, 1990

Printed on Recycled Paper

Good morning. My name is Edward Osann, and I am Director of the Water Resources Program of the National Wildlife Federation. The Federation is the nation's largest conservation organization with over 5.8 million members and supporters and 51 state and territorial affiliate organizations. The planning, development, and operation of Federal water resource projects directly affect the environmental concerns of our members.

As you know, Mr. Chairman, the National Wildlife Federation supported the enactment of the Water Resources Development Act of 1986. The genius of this legislation was the marriage of policy and projects. The logjam of proposed projects was broken, while policies were established to bring the Civil Works program into step with current needs, environmental sensitivities, and budgetary realities. By contrast, the 1988 Act, a multi-billion dollar authorization in its own right, broke no new ground regarding policy, but rather served to reestablish the biennial cycle of water project authorizations, and reconfirm the application of the reforms contained in the 1986 Act.

We believe that the time has come again to consider some important new policy directions for the Corps of Engineers. While the reforms contained in the 1986 Act have generally worked well, experience to date identifies some limitations that need to be addressed. Simply put, cost sharing does not solve all water resources problems. In our view, there are at least five areas where Congress and the Administration should strengthen the Civil Works program before authorizing additional billions for the Corps. These are:

- Flood plain management;
- Shoreline protection;
- Wetland protection;
- Reservoir management; and
- Agricultural benefits.

In addition, the subcommittee should fashion a similar array of financial and environmental reforms for the Small Watershed Program of the Soil Conservation Service.

Federal investment in flood control should be reduced when state and local governments allow unwise flood plain development.

For decades, local government planners and administrators have known of the functioning of flood plains and the hazards of flood plain development. Since its enactment in 1968, the Federal Flood Insurance Program has produced detailed mapping of the flood hazard areas in the great majority of the flood prone communities across the nation. Yet widespread development of flood plains continues, involving structures that are subject to extensive flood damage, as well as fills that constrict flood flows and raise the flood hazard level to higher elevations. The Federal flood control program is increasingly being called upon to protect not only the riverside communities settled in an earlier era, but the subdivisions and shopping centers of the 70's and 80's, where the risks were known but disregarded.

The cost-sharing requirements enacted in 1986 are clearly insufficient to prevent this needless risk and the attendant damage to riparian resources, especially in hot real estate markets. We recommend that this legislation establish a date certain after which new or substantially reconstructed structures located in the 100-year flood plain may not be included in the benefit base for justifying new Federal flood control projects. Additionally, the presence of such structures and other floodway constrictions should serve to raise the non-Federal share of any project that may still be justified.

A related problem involves flood control structures that allow or encourage additional flood plain development, justifying more costly flood control measures for the induced development. Many projects are justified and sized by the inclusion of flood damage reduction benefits for future floodplain development in the benefit-cost analysis. This bill should direct the Secretary of the Army to eliminate flood damage reduction benefits attributable to new development in flood plains and coastal high hazard areas from the benefit base for justifying new Federal projects.

Federal investment in beach nourishment and erosion control should be limited to states and communities with sensible shoreline development policies.

Beach renourishment projects require repetitive financial expenditures, are temporary in nature, and frequently benefit only a relatively small number of private landowners. Such projects are often used to justify further development of unstable coastal areas that are subject to flooding, erosion, sea level rise, and severe storms. This increases future Federal liability under the flood insurance and disaster assistance programs and jeopardizes additional human lives and property. Over the long term, these costs generally undermine the short term economic benefit which might be derived from increased shoreline development.

In order to respond to these problems, all Federally subsidized beach renourishment projects need to be coupled with a sizeable public benefit, such as increased access to the beach, and a commitment to guide new development away from the shoreline. We recommend that before any new beach protection project is authorized, the affected state must have a functioning beachfront management program which implements a policy of strategic retreat from the shoreline and includes the following components:

(1) a prohibition on new development seaward of an erosion setback line (based on pre-project beach size) of at least 50 times the annual erosion rate;
(2) a prohibition on the construction of new hard structural stabilization projects, such as seawalls and groins, and their reconstruction if damaged by 50% or more; and
(3) provisions for the relocation of existing structures in erosion-prone areas.

The growing national recognition of the value of wetlands should be more fully reflected in the Army Civil Works program.

It has been almost two years since the National Wetlands Policy Forum released its landmark report recommending broad strategies for protecting wetlands, and over one year since President Bush first pledged his commitment to the "No Net Loss" goal. Yet there has been virtually no action toward the actual achievement of this goal to date. At the Federal level, efforts to further the No Net Loss goal have been foundering.

The level of public interest and awareness of our wetland resource problem has never been higher. Citizens are demanding action because --

- Over half of our national wetlands inventory has been lost over the past 200 years;

- Losses of 300,000 to 500,000 acres continue to occur each year, despite increased Federal attention and increased funding for wetlands acquisition in the past few years;

- Some states, such as Ohio, Iowa, and Illinois have lost more than 80% of the state's original wetland base;

- Dramatic declines in North American waterfowl populations are but one indicator of the great value we continue to squander by delaying wetlands protection.

The statutory establishment of the no net loss goal is the key to protecting America's remaining wetlands. We must stop the hemorrhage of wetland losses by establishing this clear goal for the Army Civil Works program in this bill. No net loss of wetlands should be the initial standard for the program, while net gain of wetlands should be the target for the long term. A wetlands action plan should incorporate long-range measures to accomplish these goals, as well as those associated with the North American Waterfowl Management Plan.

A second major step to achieve the no net loss goal would be a modification of the Fish and Wildlife Coordination Act to make the recommendations of state and Federal fish and wildlife agencies binding upon the Civil Works program, unless and to the extent such recommendations are found to be inconsistent with other applicable law. Too often the Coordination Act report of the wildlife agencies sets off an interagency bargaining process that fails to fully protect the wetland resources at risk. We recommend that this bill remedy this longstanding deficiency in the Coordination Act, and make the Army Civil Works program a vehicle for positive protection of wetland resources.

We must also call the subcommittee's attention to that part of the country where the loss of wetlands is most acute: **coastal Louisiana**. The rate of coastal wetland loss is nearly one square mile per week. Nationally important natural resources are being jeopardized with the loss of habitat that supports 30% of the country's annual commercial harvest of fish and shellfish, 40% of the country's annual wild harvest of fur and hides, and important wintering areas for the migratory birds of the Mississippi Flyway.

Federal water resource development projects have trained the flow of the Mississippi River to deliver the fresh water and sediment needed for marsh maintenance, salt water repulsion, and beach nourishment into the deep waters of the Gulf of Mexico, denying these vital benefits to coastal areas. Federally permitted activities in the coastal area have drained and filled thousands of acres of wetlands and exposed vast additional acreage to the devastating forces of salinity intrusion through navigation and pipeline canals.

Against this backdrop, prompt enactment of Federal legislation is very important. A new Federal-state initiative to restore coastal wetlands should be included in this bill. S. 1731, introduced by Senator Breaux, is the product of hearings and negotiations on an earlier bill, and would be an excellent place for the subcommittee to start in its deliberations on this issue. The bill provides a mechanism for careful planning, timely implementation, and significant financial participation by the state. Moreover, this bill calls upon the state to work responsibly to protect its remaining coastal wetlands from destruction due to development activities. The people of Louisiana, notwithstanding a serious and persistent economic recession, have voted overwhelmingly to contribute state funds to a coordinated Federal-state effort. The 1990 Water Resources Bill should contain a workable program to match this enthusiasm and stem the nation's most acute loss of outstanding wetland resources.

The extensive reservoir system built and operated by the Corps is a national asset whose management should be upgraded.

Large reservoirs are dynamic ecosystems in their own right, with complex interactions between inflows, bottom sediments, temperatures, nutrients, and discharges affecting the quantity and quality of water available for fish and wildlife and other project purposes. Although the Corps collects much data in the course of its reservoir operations, much more remains to be learned that may offer significant opportunities for additional public benefits. We recommend that this legislation provide for the establishment of a technical advisory committee for each large reservoir. In our judgment, many qualified people would be willing to serve without pay, if a structure were presented to expand the body of knowledge relevant to the management of large reservoirs.

Recent controversies over reservoir operations in Georgia and South Dakota have highlighted an emerging need for greater public involvement in the management of Corps reservoirs. Most reservoirs are multi-purpose structures. The balancing of competing uses within the mandates of the statutory purposes of the project is a process that has traditionally gone on with little public input. We recommend that this legislation include a requirement that the development or revision of reservoir operating manuals be the subject of a public hearing, with appropriate background materials relating to proposed management decisions made available in advance. Within the framework of statutes, regulations, and contracts governing the operation of any reservoir, there is always some choice and discretion available to the project manager. The public should be apprised of the range of these choices, and have the opportunity to offer their own views.

Many older Corps projects were authorized before fish, wildlife, and recreation benefits were identified and incorporated into the planning reports upon which their authorization was based. We recommend that the Secretary of the Army be authorized to manage all existing dams and reservoirs for recreation and fish and wildlife purposes to the extent that such management does not seriously impair other project purposes, and, if necessary, to modify the terms of project repayment if reservoir storage is reallocated. Often, substantial public benefits can be achieved with minimal impact on original project purposes.

Planning for new Corps projects should be consistent with national farm policy.

Many Corps projects are intended to provide benefits to agriculture, such as reduced flood damage to crops. The commodity prices used to calculate these benefits, however, are often biased toward overvaluation because of the impact of the Government's own farm price support programs. These programs are a cost to the government, and do not fairly belong on the benefit side of the Corps' benefit-cost calculations.

Flood control projects can and do stimulate agricultural output. Unfortunately, when the crops produced are those chronically in surplus, such as cotton or corn, increased production can have unintended nationwide effects on the carryover of program crops, on crop prices, or on the rate of set-aside acreage. The use of more accurate commodity prices in benefit-cost analyses will help to better identify those water resources projects that will actually produce a net increase in benefits to the nation.

This legislation should direct the Secretary to use subsidy-free prices computed by the Department of Agriculture in evaluating agricultural benefits of proposed Corps projects. The Corps and the Department of Agriculture have already agreed to such a procedure, but have been barred by the Appropriations Committees from putting it into effect.

That portion of the Small Watershed Program of the Soil Conservation Service (SCS) within this committee's jurisdiction could benefit from many of the reforms enacted for the Corps.

As with other water resource development projects, SCS Small Watershed Projects often involve modification of environmentally sensitive areas. They alter the way wildlife is distributed and affect other important environmental factors, such as water quality and land use.

The Administration has recommended changes in SCS cost-sharing requirements to conform more closely to those established for the Corps program. We support the Administration's recommendations, but believe that the reforms should go further. We urge that this legislation include provisions to --

- deauthorize dormant SCS projects or unbuilt portions of projects;
- place greater emphasis on land treatment and other predominantly non-structural measures;
- encourage greater use of the Small Watershed Program in non-point pollution control programs;
- improve the efficiency and quality of the environmental reviews given to individual projects.

The National Watershed Conference convened last year by the National Association of Conservation Districts supported these and other measures to improve the program.

OBJECTIONABLE PROJECTS AND PROVISIONS

Passaic River, NJ. The Passaic River Project is a nine hundred million dollar experiment to reduce flooding in the basin by passing flood flows through a 35-foot diameter tunnel. It would destroy wetlands and parks and is likely to threaten the quality and quantity of upper basin groundwater. The uncertainties and controversies surrounding this expensive plan mean that neither the State nor any other entity is likely to accept the expensive role of local sponsor.

Proponents have suggested constructing a tunnel extension to Newark Bay to reduce project-induced flooding in the lower basin. This would satisfy one objection to the Corps project, but, the $300 million cost of this fix will exceed the benefits, and could disrupt the ecosystem of Newark Bay and weaken the land fill on which Newark Airport is built.

The State of New Jersey has appropriated funds to buy out the properties most in danger of flooding. The Corps should be directed to formulate a mix of structural and nonstructural measures to reduce the remaining potential flood damage in an environmentally benign and economically efficient manner.

Fort Wayne, Indiana. Local sponsors propose to widen four miles of the Maumee River in connection with the Corps project, although this activity has not been evaluated in the Corps' Environmental Impact Statement (EIS). In order to meet the requirements of the National Environmental Policy Act, the Corps must incorporate an analysis of the environmental effects of the locally-sponsored Maumee River widening in its "completed" EIS on the proposed Federally-authorized levees. Furthermore, we believe that this activity is so clearly unacceptable that any authorizing legislation must specifically bar the crediting of the costs of the widening to the non-Federal share of the project. The Maumee River widening would remove four miles of riparian habitat and inflict more environmental damage than all the other structural measures combined.

Mill Creek, TN. The proposed flood control project at Mill Creek, TN, has no local sponsor, indicating a lack of confidence in the project's effectiveness. The assumed protection of the proposed dam would encourage further development of the flood plain. Large floods could breach the dam, resulting in larger losses of property and life than would occur to existing properties without the project.

Rio De La Plata, Puerto Rico. The Corps proposes to excavate nearly 6 million cubic yards to widen and straighten some 8 miles of the Rio de la Plata. In combination with proposed levees, this channelization is intended to provide protection against the Standard Project Flood, determined to have a probable frequency of 1 in 320 years. Without the channelization, the levees would provide protection against the 100-year flood. It should also be noted that substantial land enhancement benefits are claimed for 1238 acres of the existing flood plain that would be converted for urban use, with a residential population projected to reach 36,350. Since reduction in flooding to existing communities can be accomplished at less cost and with less environmental damage, we urge that the channelization of Rio de la Plata not be authorized.

Martin County, FL and Myrtle Beach, SC. The proposed beach renourishment projects at Martin County, FL and Myrtle Beach, SC should not be authorized because they will require repeated maintenance at Federal expense. This would be the sixth renourishment project in 17 years for Martin County, while for Myrtle Beach this would be the third renourishment project in five years. The induced shoreline development will also increase future Federal flood insurance liability and potential disaster relief payments.

Despite one of the most progressive structural retreat policies in the nation, lack of enforcement by the South Carolina Coastal Commission is allowing structures damaged or destroyed by Hurricane Hugo to be replaced and rebuilt in the same location. Beach renourishment will facilitate continued development of the unstable coastal areas that are subject to flooding, erosion, sea level rise and severe storms. Both the Martin County EIS and the Myrtle Beach Environmental Assessment are quite clear in stating that beach renourishment will encourage continued development of the coastal area.

The Subcommittee should authorize beach protection projects only in communities that enforce a shoreline development policy, including erosion setbacks which factor in predicted sea level rise, moratoria on shoreline development, and incentives for moving existing structures away from the shore.

We ask the committee not to authorize the proposed deepening of **Bayou La Batre, AL**, but instead, authorize a study to monitor the effects of dredge spoil disposal in this area. In 1989, the Environmental Protection Agency, National Marine Fisheries Service, U.S. Fish and Wildlife Service, and Alabama Department of Environmental Management established guidelines for a monitoring study to be conducted over a three year period to provide additional site specific information regarding the disposal of dredged material on Isle Aux Herbes and within Mississippi Sound. This study will determine the long term impacts of dredge spoil disposal on benthic organisms, the local shrimp populations on which the fishing industry depends, and the habitat value of marshes created from dredged materials.

The hiatus during the study period will enable the Corps to reevaluate the economic benefits claimed for the project attributable to commercial fishing. Because access is open to anyone to harvest butterfish and shrimp, potential profits to fish harvesters will be quickly dissipated as average catches per unit of effort fall while the number or size of fishing vessels increases. Moreover, increased catches will lead to lower prices and further decrease the anticipated benefits. While the target species of this proposed project are not yet threatened, overinvestment in the fishing industry worldwide is causing severe depletion of many fish species.

Authorization of land acquisition for the proposed **Montgomery Point Lock and Dam, AR,** before completion of the final planning report/EIS would be inconsistent with the policy of this subcommittee and the Administration. The Corps has not even completed a *draft* EIS and the U.S. Fish and Wildlife Service has not begun its Habitat Evaluation Procedures (HEP). A premature authorization of the project at this time would prejudge the outcome of these economic and environmental evaluations.

Proposed 100-year level of flood protection. Section 305 of the Senate bill would set the recommended level of protection at 100 years for Corps flood control or storm damage prevention projects. This proposal does not make economic sense. It would make the nation worse off wherever it resulted in a larger project than would be recommended under the current standard of maximizing net economic benefits. For example, assuming that net benefits would be maximized at the 40-year level of protection, and that the incremental cost of raising protection to the 100-year level is $200 million, and the incremental benefits are only $110 million, the nation would be $90 million worse off by overbuilding under the proposed standard. Benefits might also be maximized for levels of protection on some flood plains greater or less than 100 years. Only by chance would benefits be maximized at the 100-year level.

It is argued that there is an inconsistency between the Federal Emergency Management Agency's 100-year level of protection "standard" and the Corps' maximization of net benefits standard. In fact, the policies of these two agencies are consistent. FEMA's standard was set to limit taxpayer subsidies to shortsighted floodplain development. The Corps' present standard also limits uneconomic taxpayer expenditures that subsidize future flood plain development. We urge the subcommittee not to adopt the proposed arbitrary standard.

The proposed **Military Benefit Credit** for harbor and channel projects in section 306 of the Senate bill will impair the cost-sharing requirements of Public Law 99-662 and should not be included in this legislation. The inclusion of unsubstantiated and unquantifiable benefits would arbitrarily deflate the non-Federal share of navigation improvements. Military benefits are already subsumed within the broad Federal interest that justifies the Federal contribution of 50 to 75% to virtually every navigation project which involves the military. If this provision remains in the bill, we suggest that the entire provision be made applicable only when and to the extent the share of the project costs allocated to military benefits exceeds the Federal share of the project under current law.

GENERAL PROVISIONS SUPPORTED

We support the increase in **Harbor User Fees** in section 13 of the Administration bill that will be introduced as a separate bill and referred to the Finance Committee. The Administration's proposed increase from $0.40 to $1.25 per $1,000 value of goods loaded or unloaded will generate nearly $300 million per year in additional revenue and will shift the financial burden of operation and maintenance of coastal channels and harbors from the Federal government to the users. We note, however, that user fees based upon vessel size and specific dredging costs would provide greater efficiencies than *ad valorem* fees, and we urge the subcommittee to consider such an alternative approach.

The Federation applauds the Administration's decision to withdraw the proposed **Galveston Bay Area Navigation Project** from consideration in this bill. We ask the Committee to defer future consideration for this project until a supplemental EIS is completed and economic justifications clarified.

We support section 203 of the Senate bill that would authorize the Corps to formulate and evaluate plans to restore the **Lower Truckee River** in consultation with the Pyramid Lake Indian Tribe and the Secretary of the Interior. The removal of spawning grounds by the channelization of the Lower Truckee River and diversions for irrigation has directly contributed to the endangerment of the cui-ui and Lahontan cutthroat trout. River restoration will assist the recovery efforts for these species.

We support the Administration's proposed expansion of cost-sharing into the areas of **Planning Assistance to States** (Sec. 11) and **Flood Plain Management Services** (Sec. 12). These provisions are a logical outgrowth of the cost-sharing provisions contained in the 1986 Act. Just as cost-sharing has reduced the number and size of marginal projects constructed, cost-sharing of feasibility studies will reduce the number of pie-in-the-sky study proposals which consume time, manpower, and scarce Federal funds.

Extension and increase in authorization of Sec. 1135. We support the proposed five-year extension of section 1135 of the 1986 Act which allows the Secretary to modify existing projects to improve the quality of the environment. It has become evident that the $25 million originally authorized is not sufficient to respond to the great interest in this section by project sponsors. The cost ceiling should be increased to $70 million, subject to provisos that such modifications be associated primarily with improvements to the quality of the environment, recreation, and fish and wildlife habitat. Modifications under this section should not be used to expand other project purposes.

CLARIFICATIONS NEEDED IN THE 1986 WATER RESOURCES DEVELOPMENT ACT

Federal share of Operation and Maintenance costs for Fish and Wildlife Enhancement

Section 906(e) of the 1986 Act provides for installation of certain fish and wildlife enhancement measures to be 100% Federally funded, such as measures to benefit Federally listed endangered species, National Wildlife Refuges, or anadromous fish. When the benefits of enhancement are not national, 25% of first costs must be provided by non-Federal interests.

The non-Federal share of operation, maintenance, and replacement (OM & R) costs for enhancement is also specified as 25%, without addressing those measures deemed to provide national enhancement benefits. Corps policy guidance states that the non-Federal share of all OM & R costs will be 25%. We recommend that the provision for full Federal funding of national enhancement activities be included in this bill.

User contributions for Inland Waterway feasibility studies

The 1986 Act carried new cost-sharing requirements for all new Corps feasibility studies -- all, that is, except for feasibility studies for inland waterway projects. The Corps now contends that such studies must have local sponsors, while supporters of such projects as the Lake Erie-Ohio River Canal contend that such studies should be 100% Federally funded. The bill should clarify that such complex and controversial studies are not to be performed at full Federal expense. If local interests are unwilling to contribute, the 50% non-Federal share should be required to come out of the Inland Waterways Trust Fund.

Ability to pay

The subcommittee has been asked to relax the flood control cost-sharing requirements under the "ability to pay" provision of section 103(m) of the 1986 Act. The Corps interim final rule at 33 CFR Part 241 requires that the normal non-federal cost share of between 25% and 50% be reduced by an eligibility factor based on state and area relative income. The adjusted percentage must be at least 25% of the lesser of the estimated costs or benefits.

The fact that no local cooperation agreements (LCA) have been reached for new Mississippi River and Tributaries projects does not indicate that cost-sharing is not working as intended. As former Senator Stafford argued during the debate on this provision, "Even the poorest communities should be able to find a quarter to invest in order to get $1 or more in return." In some cases, the intended local beneficiaries may be hesitant to commit to pay 25% of the costs because they believe that the Corps' benefit estimate is inflated. If so, these projects fail the market test established by cost-sharing and should not be built.

The environmental benefits of cost-sharing for flood control are most pronounced in the Lower Mississippi Valley, where so many authorized projects are environmentally damaging yet economically marginal. We strongly object to any weakening of the cost-sharing standards enacted in 1986.

Deauthorizations

Harry S Truman Dam, MO Mitigation. The Subcommittee should not allow mitigation authorization for the Harry S Truman Dam to sunset. The authorization for mitigation at Truman Dam included acquisition of up to 1000 acres to mitigate damages to the downstream channel caused by peak power generation using water from Lake of the Ozarks back pumped into Truman Reservoir during off peak hours. Even though back pumping has been deferred indefinitely because of large fish losses during testing, current peaking operations are causing damage to the downstream channel similar to what would be caused by pump storage operations. Therefore, the authorized mitigation should be implemented immediately. In no case should mitigation authority lapse while the underlying activity requiring mitigation remains authorized.

We would also like to bring to the subcommittee's attention the District Engineer's failure to render a Record of Decision on the 1985 Draft Environmental Assessment, "Future Direction of Hydropower," regarding operation of the Truman powerplant. The Draft EA predicted significant adverse environmental effects from peaking operations, requiring the project to cease peaking operations until a full EIS on dam operations is complete. Environmental damages are continuing while the Corps remains out of compliance with the National Environmental Policy Act.

Ten-year sunset for the Big Pine Lake and Lafayette Lake Projects, IN. Section 1001(b)(1) of the 1986 Act provided for automatic deauthorization of projects that have not had funds obligated for construction during the preceding 10 full fiscal years. A list of unconstructed projects, or unconstructed elements, is to be transmitted to Congress by the Secretary. Because no funds have been obligated on the Big Pine and Lafayette Lake projects since 1977 and these two projects were on a list of dormant projects submitted to Congress in November 1987, these projects should have been deauthorized without further Congressional action. Nevertheless, on February 5th Secretary Page decided that the projects were ineligible for deauthorization because during FY 1989 expenditures of $2,271 were purportedly incurred for the purpose of updating their construction costs and benefits in the course of the Wabash Basin Comprehensive Study. After December 31, 1989, the costs of this simple calculation were assigned to planning and design costs. This keeps both projects alive, projects no one believes will ever be completed. It is questionable whether such study expenditures can constitute the kind of construction obligations that the 1986 Act contemplated.

We urge the subcommittee to specifically deauthorize these two projects. Moreover, the language in Sec. 1001(b) should be tightened so that projects that have been dead or dormant for over ten years cannot be resurrected on the the basis of specious technicalities.

Deauthorization of the Cross Florida Barge Canal. The provisions set out in S. 2253 to deauthorize the Cross Florida Barge Canal represent a wide consensus of conservation groups, the State, and the Congressional delegation. Federal lands would be transferred to the State on the condition that they be managed for public recreation. Small isolated parcels could be sold only after careful public and agency review. We urge the Subcommittee to accept this solution to ending Federal involvement with this project.

Thank you for the opportunity to present these views.

OCEANSIDE HARBOR DISTRICT

300 NORTH HILL STREET • OCEANSIDE, CALIFORNIA 92054-2885

619-966-4570

April 13, 1990

TESTIMONY TO THE SENATE SUBCOMMITTEE ON WATER RESOURCES, TRANSPORTATION & INFRASTRUCTURE

Storm Damage Reduction and Navigation Improvements
Oceanside Harbor, California

Honorable Chairman and Subcommittee Members:

We wish to thank Congress for your efforts in trying to make Oceanside Harbor a safe and efficient harbor. The feasibility study to improve the harbor breakwaters is now complete and preconstruction engineering and design will be completed in F/Y 1990. It is now time to authorize construction. The general public's interests, both commercial and recreational, are served by this project as are the military needs of the nation. As you may know, our harbor is homeport for a United States Coast Guard Cutter and we share a common entrance with marine and navy traffic from Camp Pendleton Marine Corps Base.

We have experienced continuous damage to our inner harbor facilities and vessels moored there. Over the last 12 years we have expended over $8.6 million in repairing the damages. We also experience problems at the entrance from shoaling causing hazardous navigation conditions, resulting in the loss of lives in the entrance channel. There have been 142 boating accidents, 56 serious injuries and 13 deaths within the harbor entrance. Our practice of stationing a rescue boat at or near the entrance during the boating season is what prevents these numbers from being significantly higher. This has caused direct economic impact to both commercial fishing and our community.

It is requested that the project for Navigation and Beach Erosion Control at Oceanside Harbor, California authorized by the River and Harbor Act of 1965 be modified to authorize the Secretary of the Army to implement storm damage reduction and navigation improvements in accordance with plans and conditions recommended in the report of the Chief of Engineers.

The estimated total cost of the project is $4,970,000 of which $3,263,000 is federal and $1,707,000 is non-federal. We, as the local sponsor, are willing and financially able to provide the required cost sharing of the project and are anxious to move forward with the improvements.

On behalf of the Oceanside Harbor District and the City of Oceanside, California, I urge the subcommittee to support storm damage reduction and navigation improvements to our harbor entrance.

Again, we wish to thank you for allowing the Oceanside Harbor District and the City of Oceanside to state our support for the proposed project at Oceanside Harbor.

Ben Ramsey

Ben Ramsey
Deputy Mayor
City of Oceanside

City of Paragould, Arkansas
221 WEST COURT STREET
PARAGOULD, ARKANSAS 72450

MAYOR 501-236-6974 POLICE 501-236-7621 CITY CLERK 501-236-7791

April 13, 1990

Honorable Daniel P. Moynihan, Chairman
Senate Sub-Committee on Water Resources,
Transportation and Infrastructure
Room 458, Dirksen Senate Office Building
Washington, D.C.

RE: FLOOD CONTROL ACT OF 1986 -
ABILITY TO PAY
FILE# 1164-1

My current schedule and the short notice which I received of the meeting of the Senate Sub-Committee on Water Resources, Transportation and Infrastructure concerning the ability of local entities to pay the non-federal cost of flood control projects causes me to write this letter. The fact that I am not appearing personally to testify before the Sub-Committee should not be taken as a lack of interest on my part but rather an inability to reschedule my obligations to accomodate this meeting.

The City of Paragould is bisected by Eight Mile Creek. Eight Mile Creek provides the primary drainage for the Eastern half of Crowley's Ridge. Crowley's Ridge bisects Greene County in a North-South direction. Thus, the City of Paragould is receiving and must accommodate too, almost one-half of the rainwater that falls on Greene County, Arkansas. This has always been a difficult task. However, with the increasing population of the County, the growth of the City and the development along Eight Mile Creek, we find that we are suffering more and more from devastating floods.

In 1969, the City of Paragould suffered a devasting flood and we called on the Corp of Engineers to assist us in developing plans to alleviate the problem. While the problem was being studied and plans were being developed, we suffered an even greater flood in April 1973. With the assistance of the Corp of Engineers we have been able to develop plans to alleviate flooding in the City of Paragould and to eliminate threat to life and damage to property. The cost of this project is in excess of $13,000,000. Under the present federal laws, regulations and guidelines, the City of Paragould as local sponsor must pay 37% of the cost or $4,800,000. 5% of the cost of the project or $650,000 must be paid by the City of Paragould in cash. The balance will be represented by acquisition of right-of-way, relocation of bridges and utilities and other activities which must be borne by the local sponsor.

The City of Paragould, like most cities today, is called upon each year to provide more and more local services to its citizens without the benefit of any increase in budgeted funds with which to provide these services. Thus, each year it becomes a critical decision for the City of Paragould to make in allocating insufficient funds to provide such things as fire protection, police protection, sanitary services, streets, municipal court system and other absolutely essential services. There are no funds available to meet urgent needs such as flood control. The City of Paragould has undertaken the implementation of a local property tax to underwrite the cost of this project but has been unable to persuade the electorate to levy such tax since such a tax must be levied by a majority of the voters and the impact of the flooding falls on a minority of the voters.

This flooding problem is not a local problem. Eight-Mile Creek is only one tributary that leads to Locust Creek which must provide an adequate outlet and does not. Locust Creek leads to other creeks and ditches which ultimately find their way to the St. Francis River, which ultimately finds its way to the Mississippi River. Flood control projects such as these are best addressed from a broader perspective.

We feel that the Corp of Engineers should be given authority and responsibility to alleviate flooding problems such as this and that such projects be funded from federal resources so that the impact of flood control falls on the general population rather than upon the small area of localities that happen to be in the low-lying areas that receive the impact of flooding.

On behalf of the people of the City of Paragould, I urge you to reexamine the present criteria in determining ability to pay. We feel that these projects should be funded federally. If it is the decision of the subcommittee that a part of the cost be borne locally, then we feel that the ability to pay should be based on actual determined local economic factors and not on arbitrarily computed benefits.

Respectfully submitted,

CITY OF PARAGOULD
BY Charles Partlow
Charles Partlow
Mayor

AUBREY J. LAPLACE PRESIDENT
JESSE BARTLEY VICE PRESIDENT

The Board of Levee Commissioners
OF THE
Pontchartrain Levee District
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AND YOUR FAMILY

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COMMISSIONERS
STEPHEN CUPIT
JOSEPH GAUTREAU
DAVID LABORDE
KERNELL GOUDIA
LAWRENCE MOCH
RONALD ST. PIERRE

April 19, 1990

STATEMENT
PRESENTED TO
SENATE SUB-COMMITTEE ON WATER RESOURCES,
TRANSPORTATION AND INFRASTRUCTURE
SENATOR DANIEL P. MOYNIHAN

Gentlemen:

The Pontchartrain Levee District, State of Louisiana, lies between Baton Rouge and New Orleans, east of the Mississippi River. Our area extends to the shoreline of Lake Pontchartrain and is subject to extensive hurricane tidal flooding, particularly in St. Charles Parish. This area is included in the project "Lake Pontchartrain & Vicinity, Louisiana, Hurricane Protection" authorized by P.L. 89-298. That portion of the Project in St. Charles Parish is extimated to cost $87,400,000. The Pontchartrain Levee District cost share is $26,220,000 or thirty per cent.

Annual income for the Pontchartrain Levee District is $3,200,000. Critical operations and maintenance costs are about $2,700,000. Bonding capacity is very limited. Annual financing requirements of the Pontchartrain Levee District range from $1,085,000 to $5,958,000 during the first four years, beginning in 1990, and more than $1,000,000 during five of the remaining twenty year construction period. The Levee District will be more than hard pressed to be able to successfully finance its thirty per cent share, or perhaps not be successful at all. A lesser cost share is needed. The project must not be delayed.

Therefore, it is urged and recommended by the eight member Board of Commissioners of the Pontchartrain Levee District that language be included in the 1990 Water Resources Act to allow a reasonable cost sharing portion for the local sponsor for Hurricane Protection in St. Charles Parish, Louisiana, which is to be based on

"AN EQUAL OPPORTUNITY EMPLOYER"

criteria of economy in the area and the ability of the local sponsor to pay.

Your favorable consideration is solicited.

Sincerely submitted,

Aubrey J. LaPlace

Aubrey J. LaPlace, President
Board of Commissioners

The Board of Commissioners,
Pontchartrain Levee District:

Aubrey J. LaPlace, President - Iberville Parish
Jesse Bartley, Vice-President - Ascension Parish
Stephen Cupit - St. John the Baptist Parish
Joseph Gautreau - Ascension Parish
Kernell Goudia - St. John the Baptist Parish
David Laborde - St. James Parish
Lawrence Moch - East Baton Rouge Parish
Ronald St. Pierre - St. Charles Parish

KENNETH L. EDWARDS
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RIVERSIDE COUNTY FLOOD CONTROL AND
WATER CONSERVATION DISTRICT
RIVERSIDE, CALIFORNIA 92502

March 26, 1990

Honorable Daniel P. Moynihan
Chairman, Sub-Committee on Water Resources,
Transportation and Infrastructure of
the Committee on Environment and Public Works
United States Senate
SD-458 Dirksen Senate Office Building
Washington, D.C. 20510-6175

Dear Senator Moynihan: Re: S 2183

With regards to S 2183, the Water Resource Development Act of 1990, we are submitting herewith a report regarding the Santa Ana River at the Norco Bluffs. This report is being submitted as our official statement and request it become a part of the record on hearings held by the Sub-Committee on Water Resources in connection with S 2183.

The problems set forth in the report are of great concern to the City of Norco, the Flood Control District and the Board of Supervisors of Riverside County.

Favorable support by the Committee of our request will be very much appreciated.

Very truly yours,

Melba Dunlap

MELBA DUNLAP, Chairman
Board of Supervisors

SUMMARY3
bjp

SANTA ANA RIVER MAINSTEM AT NORCO, CALIFORNIA

The Santa Ana River courses past the City of Norco, California along the City's northern border. The left bank of the river at this location is defined by a high bluff ranging from 46 to 96 feet above the streambed. The banks of the bluff were relatively steep but prior to the mid-1950's were relatively stable. Norco was an unincorporated community prior to 1964 and the area along the bluffs was relatively undeveloped until the 1960's and 1970's.

Encroachment along the north (right) bank by agricultural activities has had an effect of forcing the river more toward the left bank. During major flooding along the Santa Ana River in January and February of 1969, river flows attacked the left bank of the river and scoured and undermined the high banks. Considerable sections of the bluff collapsed into the river - the materials were washed on downstream into Prado Reservoir. This retreat of the bluffs caused alarm to homeowners near the river bank and City officials. In response to these concerns the Army Corps of Engineers under the emergency powers authority constructed a 3,000 foot long rock and wire revetment near the base of the bluffs to try to minimize further undercutting and slope failure of the bluffs. Subsequent flows in the river demonstrated this effort to be ineffective. Some of this revetment is partially or completely inundated by river bottom silts.

During the floods of February and March 1978, the river again attacked the bluffs, causing further retreat of the bluffs. The City of Norco placed a protective chain link fence along River Road near the bluffs to protect the public from danger. The fence had to be moved farther back in 1980 due to additional river action on the bluff.

During the 1969 floods it is estimated that up to 50 feet of bluff retreated and in 1980 another 30 to 40 feet of bluff retreated. One residential structure was undermined and had to be abandoned and demolished before it fell into the river. The Corps of Engineers estimate at least 50 homes could be lost to continued bluff retreat due to action of the Santa Ana River along the bluffs. Public utilities such as water, sewer, gas, electric and communication facilities are in danger of rupture and loss due to this bluff retreat.

SOLUTION

The Los Angeles District of the Corps of Engineers has done a Reconnaissance Assessment of the problem and have proposed a solution with a total estimated cost of about $6,500,000. They determined that the project would have a benefit cost ratio of 1.14 to 1.00; thus the project is economically justified as required by law.

A request was made to consider a project for protection of the bluffs under the Small Flood Control Project

Authority under Section 205 of the Flood Control Act of 1948. The Corps believes that a project of this nature is not appropriate under the Section 205, Small Project Continuing Authority. However, there is a Congressionally authorized project for the Santa Ana River Mainstem, which includes improvement along the Santa Ana River Channel in Orange County, enlarging Prado Dam, constructing a new dam at Seven Oaks in San Bernardino County, enlarging the Mill Creek levees near Redlands, California, improvement of Oak Street Drain in Corona, California and improvement of Santiago Creek in Orange County. Subsequent to that authorization, improvements to San Timoteo Creek near Redlands, California were included by the Congress as an authorized element of the Santa Ana River Mainstem Project.

The Norco Bluffs are located along the mainstem of the Santa Ana River just upstream of the entrance to Prado Dam reservoir. Therefore, because the bluffs are located on the Santa Ana Mainstem and the undercutting of the bluffs is due to flooding conditions on the Santa Ana, it would seem logical to authorize the Norco Bluffs protection project as an element of the Santa Ana River Mainstem Project. However, if Congress prefers to authorize construction of the plan by some other means or authority rather than as an element of the overall Santa Ana Mainstem authorization, that would certainly be acceptable to Riverside County and the City of Norco. What we are asking for is a recognition that there is a federal interest in addressing this problem and that Congress authorizes construction of a flood damage prevention project for Norco Bluffs to address this critical issue.

Santa Clara Valley Water District

5750 ALMADEN EXPRESSWAY
SAN JOSE, CALIFORNIA 95118
TELEPHONE (408) 265-2600
FACSIMILE (408) 266-0271

AN AFFIRMATIVE ACTION EMPLOYER

March 8, 1990

Senator Daniel P. Moynihan, Chairman
Subcommittee on Water Resources,
Transportation and Infrastructure
Committee on Environment and Public Works
Russell Senate Office Building, SR-464
Washington, D.C. 20510-3201

Dear Senator Moynihan:

Subject: Construction Authorization for Coyote Creek Flood Control Project (Corps of Engineers)

This is to request that the enclosed statement be submitted in the record as written testimony during your Subcommittee hearings regarding your recently introduced Water Resources Bill of 1990 (S. 2183). The enclosed copies of our written testimony support including in that Bill construction authorization for our Coyote Creek flood control project (including Berryessa Creek).

Sincerely,

Ronald R. Esau
General Manager

Enclosure

STATEMENT IN SUPPORT
OF THE

Coyote/Berryessa Creeks Flood Control Project

March 7, 1990

Before the
United States Senate
Committee on Environment and Public Works
Subcommittee on Water Resources, Transportation and Infrastructure
Senator Daniel P. Moynihan, Chairman

SUMMARY

THIS STATEMENT URGES CONGRESSIONAL AUTHORIZATION OF CONSTRUCTION OF THE COYOTE/BERRYESSA CREEKS PROJECT

COYOTE AND BERRYESSA CREEKS

On March 31, 1988, the Board of Engineers for Rivers and Harbors gave its support to the proposed flood control project for Coyote and Berryessa Creeks.

The Water Resources Development Act of 1986 (PL99-662) gave Pre-construction Authorization (planning, engineering and design) to the Coyote/Berryessa Creek Project. The Corps of Engineers has completed its planning of flood control improvements to Coyote and Berryessa Creeks in Santa Clara County, California, and is recommending a $60.8 million project. Berryessa Creek is a tributary of Coyote Creek and both of these are part of the Guadalupe River and Adjacent Streams Project and Study which was authorized and has been in progress since 1941.

The flood problem persists: most recently, Coyote Creek overtopped its banks in 1982 and again in 1983 causing evacuation of hundreds of people and many millions of dollars in damage. The plight of the flooded community of Alviso, part of the City of San Jose, made national network news during those flood events.

STATUS

The Coyote/Berryessa Creek project has advanced to final approval stages: As described above, the project received the approval of the Board of Engineers for Rivers and Harbors on March 31, 1988. The Assistant Secretary of the Army has submitted the project to Congress on December 5, 1989 (House Document No. 101-126). Assuming construction authorization can be achieved now, construction funding can be appropriated and construction could begin in 1991. A more detailed calendar showing the history and future of the project follows.

BACKGROUND

The Guadalupe River and Adjacent Streams Study authorization includes the Guadalupe River, Coyote Creek and Berryessa Creek. The Guadalupe River and Coyote Creek (and its tributary Berryessa Creek) are the two major waterways that flow through the highly urbanized area of Santa Clara County. Historically, they have flooded the downtown areas of San Jose, Alviso and Milpitas beyond local capability to prevent. Flood damages on Coyote Creek would be over $100 million during the 1% flood event to the north San Jose and Milpitas area. Coyote Creek has caused damages amounting to several million dollars, overbanking in April 1982 and again in March 1983. Hundreds of people were forced to evacuate their homes where floodwaters stood to depths up to 8 feet for many days.

On Berryessa Creek there is the potential for an estimated $20.2 million in damages to private homes and businesses from a 1% flood. Flood damages were sustained during the 1983 floods on Berryessa Creek as on Coyote Creek.

The probability of such floods occurring before implementation of flood prevention measures is quite high. A 50-year flood has an 18 percent chance of occurring during this same period. There is strong potential, therefore, that a damaging flood will occur before the problem can be resolved.

Coyote Creek

Coyote Creek has the largest watershed in Santa Clara County draining all of the east foothills including portions of the Cities of San Jose and Milpitas.

Flooding has been experienced many times on Coyote Creek prior to construction of Coyote and Anderson Reservoirs, including occurrences in March 1903, January 1906, December 1906, January 1909, March 1911 (maximum recorded), February 1917, February 1922, January 1923, February 1926, February 1927, March 1930 and December 1931.

Since 1959, the tandem operation of Coyote and Anderson Reservoirs has reduced the frequency of flooding. Table 1 lists discharges that have occurred since the construction of Anderson Reservoir in 1950.

TABLE 1

COYOTE CREEK NEAR ANDERSON RESERVOIR (MADRONE) HIGHEST FIVE DISCHARGES SINCE COMPLETION OF ANDERSON AND COYOTE RESERVOIRS

Date of Crest	Discharge(cfs)	Order of Magnitude
3 April 1958	5,750	1
25 February 1969	3,600	3
2 April 1974	985	5
1 April 1982	3,200	4
1 March 1983	4,380	2

The inadequate and unstable levees which now exist are providing very little and uncertain protection to the community of Alviso and the Rincon de los Esteros Redevelopment Area in San Jose and the Milpitas Redevelopment Area east of the creek. These levees do not meet, and were never intended to meet, any minimum flood control criteria for design, construction or maintenance. The reliability of these levees is questionable and poses a great potential hazard to adjacent development. It was their overtopping and subsequent failure which was responsible for much of the flood damages in 1982 and 1983. Over 1,600 residences, 800 mobile homes, and 250 commercial and industrial establishments are subject to a potential catastrophic failure. The potential flood depths and flood damages which could occur from Coyote Creek are:

Frequency	Flow-cfs	Depths of Flooding	Single Flood Damage
100-year	14,500	0 to 8.00	$114,000,000*

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*Coyote and Berryessa Creeks Interim Feasibility Report and EIS, November 1987

Coyote Creek will flood on an average of once every four years.

The proposed project will include construction of levees and excavation of a parallel bypass channel. An extensive revegetation plan is included as mitigation.

The cost of constructing a project from the baylands upstream four miles to Montague Expressway is estimated at $49.4 million (little to no right of way costs are anticipated). The benefit-to-cost ratio is 1.1. The non-federal cost ($14.8M) includes traditional elements (right of way, relocations) plus cash for a minimum of 25% of the total project cost. In the last three years, the local sponsor has constructed nearly $12 million under the Section 104 credit program for compatible project features in the most downstream reaches. To allow construction to proceed without interruption, Congress authorized -- in the Water Resources Development Act of 1988 -- a credit or reimbursement in the amount of $3 million for additional local sponsor-constructed measures, contingent on federal construction authorization and appropriation for the remaining two miles (approximately) of the project. The local sponsor is presently constructing measures that would be subject to this $3 million reimbursement. Construction will stop once that work is done unless federal construction authorization and appropriations are provided to allow completion of the upstream work by the Corps of Engineers.

The draft feasibility study and EIS was circulated for public review in May 1987. A public meeting was held in June 1987. The final document was published in November 1987.

Berryessa Creek

Berryessa Creek is a major tributary of Coyote Creek and drains much of the City of Milpitas and a portion of the City of San Jose.

Initially, the District applied in January 1981 for federal assistance under the Section 205 program of the 1948 Flood Control Act.

The channelization project is intended to protect portions of the Cities of Milpitas and San Jose from flood damages. Nearly all the estimated damages would be in the developed areas bounded by Lower Penitencia creek on the west, Berryessa Creek on the east, Calaveras Boulevard and Lower Penitencia Creek on the north and Montague Expressway on the south. The potential flood depths and flood damages which could occur from Berryessa Creek are:

Frequency	Flow-cfs	Depths of Flooding	Single Flood Damage
100-Year	4,000	0 to 3.0	$20,179,000*

Berryessa Creek will flood on an average of once every four years.

The project, as now envisioned, will consist primarily of trapezoidal concrete lining. There will be set-back levees and floodwalls near Messina Drive to preserve this environmentally sensitive area. Sediment control structures will be part of the project. Landscaping will be done for mitigation of project impacts.

The cost of the project is estimated at $11.4 million. The benefit-to-cost ration is 1.3. The non-federal cost ($2.8M) includes traditional elements (right of way, relocations) plus cash for a minimum of 25% of the total project cost. The non-federal costs would be partially reimbursed from the State Department of Water Resources.

In June 1984, the study was transferred to the San Francisco District to be completed jointly with Coyote Creek under the Guadalupe River and Adjacent Streams authorization.

STUDY HISTORY

The Corps of Engineers' study of flood solutions to Coyote Creek has a long history. Although authorized by Congress in 1941, the flood control investigation for the Guadalupe River and Adjacent Streams began in 1948. It was suspended in 1950 due to the Korean conflict, resumed again in 1955 and, in 1968, culminated in a recommendation that at that time there was no flood control plan that, from a federal standpoint, was economically justified. In 1971, the local community requested the Corps of Engineers to reactivate its earlier study in light of additional project benefits that had been identified. The Plan of Study was completed in 1973. The initial problem definition and alternative screening was completed in 1974. More detailed problem definition and alternative studies for the Guadalupe River and Coyote Creek were completed in

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*Coyote and Berryessa Creeks Interim Feasibility Report and EIS, November 1987

1978. The third phase, study of freshwater flooding in the Baylands, was completed in 1979. The Stage 2 report was completed for the combined Guadalupe River, Coyote Creek and Baylands. The report at that time established the financial feasibility and federal interest in the Guadalupe River. In light of severe flooding in 1982 and 1983, the Corps focused its study on Coyote Creek to address the inadequate level of protection provided by unstable levees. The study also includes Berryessa Creek, a major tributary to Coyote Creek.

In an effort to accelerate the completion of this overall program, the local community, through the Santa Clara Valley Water District, has provided a substantial amount of technical and financial assistance since 1972. Special planning studies have been completed by the Santa Clara Valley Water District for inclusion into the Corps' studies at a local cost of over $430,000. Both projects received authorizations under the Water Resources Development Act of 1986; the Guadalupe Project for Construction and the Coyote/Berryessa Project for Preconstruction (planning, engineering and design).

LOCAL COMMITMENT

The severe flood problem and the ominous threat of future damages has forced the local community to initiate a local project on Coyote Creek in anticipation of future federal participation. Nearly $12 million in local funds have been spent on the planning, design and construction of improvements on Coyote Creek to date, which are planned for incorporation into the federal project under the Section 104 credit program.

CALENDAR

The schedule for the joint Coyote/Berryessa Study:

District 205 Application on Berryessa	January 1981
Corps Recon Report on Berryessa	September 1981
District request of Corps to reevaluate Stage II Coyote report for levee integrity	November 1982
Corps Detailed Project Report (Draft DPR) on Berryessa 205 study	March 1984
Request by SCVWD to transfer Berryessa study from Section 205 to Guadalupe River Authorization	April 1984

Berryessa study transferred from Sacramento to San Francisco District	June 1984
Preconstruction Authorization (PE&D) in H.R. 6	November 1986
Draft feasibility report and EIS on Coyote and Berryessa released for public review	May 1, 1987
Public meeting on Draft EIS	June 25, 1987
Completion of joint feasibility report and EIS on Coyote and Berryessa	November 1987
Division review and approval	November 1987
Approval by the Board of Engineers for Rivers and Harbors	March 1988
Report to the Office of Chief of Engineers (OCE)	September 1988
OCE transmits report to Secretary of Army	January 1989
Secretary of Army transmits report to Congress	December 5, 1989
Authorization for Construction (S.2183)	1990
Draft GDM and Supplemental EIS	December 1990
Construction Funding	1991
Prepare Plans and Specs	1991
Begin Construction	1991

STATUS OF FUNDING

The 1990 Budget includes $762,000 to continue Preconstruction Engineering and Design on Coyote and Berryessa Creeks. The Administration's proposed budget for 1991 includes $424,000 for completion of Preconstruction Engineering and Design.

RECOMMENDATION

Based upon the present high flood risk and potential damage from Coyote/Berryessa Creek, as well as the support which the Administration and Congress has given and continues to give to the Project, it is urgently requested that the Subcommittee on Water Resources, Transportation and Infrastructure include in its Water Resources Bill construction authorization for the Coyote/Berryessa Creek flood control project.

STATEMENT OF JIMMY DON HUDSON

COMMISSIONER, TENSAS BASIN LEVEE DISTRICT

TO THE

SENATE SUB-COMMITTEE ON WATER RESOURCES,
TRANSPORTATION AND INFRASTRUCTURE

ON BEHALF OF CHANGES
TO THE
ABILITY-TO-PAY CRITERIA
FOR
FLOOD CONTROL PROJECTS

STATEMENT
BY
JIMMY DON HUDSON
TENSAS BASIN LEVEE DISTRICT

MR. CHAIRMAN AND DISTINGUISHED MEMBERS OF THE COMMITTEE, MY NAME IS JIMMY DON HUDSON. I AM A COMMISSIONER OF THE TENSAS BASIN LEVEE DISTRICT WITH HEADQUARTERS IN RAYVILLE, LOUISIANA. I APPEAR HERE AS SPOKESMAN FOR OUR DISTRICT TO PRESENT OUR CONCERNS WITH THE CRITERIA BEING USED TO IMPLEMENT THE ABILITY OF A NON-FEDERAL INTEREST TO PAY FOR COST-SHARING FOR FLOOD CONTROL WORK AS SPECIFIED IN THE WATER RESOURCES DEVELOPMENT ACT OF 1986.

MR. CHAIRMAN, FORTY-ONE PERCENT OF THE LAND AREA OF THE CONTIGUOUS UNITED STATES IS DRAINED BY THE MISSISSIPPI RIVER THROUGH LOUISIANA. THE LOWER REACHES OF THE MISSISSIPPI RIVER HAVE A WIDE, FLAT-LYING FLOODPLAIN WHICH IS RELATIVELY UNCONFINED. THIS PLACES CROPS AND CITIES ALONG THE BANKS OF THE RIVER AT GREAT RISK. FOUR OTHER MAJOR INTERSTATE STREAMS PASS THROUGH LOUISIANA. THESE ARE THE SABINE, RED, TENSAS, AND PEARL RIVERS. THESE MAJOR RIVERINE FLOODPLAINS COMBINED WITH A VAST COASTLINE CAUSE APPROXIMATELY 54% OF THE STATE TO BE SUBJECT TO PERIODIC FLOODING. THEREFORE IT HAS BEEN CRUCIAL FOR LOUISIANA TO DEVELOP FLOOD CONTROL MEASURES.

THE NEED TO IMPLEMENT FLOOD PROTECTION MEASURES PLACED AN EXTREME ECONOMIC HARDSHIP ON THE STATE, LOCAL AND PRIVATE SECTORS. IN 1928 THE U. S. CONGRESS PASSED AN ACT FOR THE CONTROL OF FLOODS ON THE MISSISSIPPI RIVER AND ITS TRIBUTAR

IES. THUS, FOR THE FIRST TIME, FEDERAL MONIES WERE COMMITTED TO HELP ALLEVIATE THIS PROBLEM. SINCE THAT TIME, THE CORPS OF ENGINEERS HAS UNDERTAKEN THE CONSTRUCTION OF LEVEES ALONG THE MISSISSIPPI, ATCHAFALAYA AND RED RIVERS AS WELL AS OTHER FLOOD CONTROL MEASURES.

LOUISIANA STILL RELIES HEAVILY ON FEDERAL FUNDING FOR FLOOD CONTROL. THEREFORE, IT WAS DETRIMENTAL TO STATE AND LOCAL INTERESTS WHEN THE CONGRESS PASSED THE WATER RESOURCES DEVELOPMENT ACT OF 1986 WHICH REQUIRED GREATER LOCAL PARTICIPATION IN FEDERAL PROJECTS. WITH MORE STATE FUNDING BEING REQUIRED TO MATCH FEDERAL MONIES, FEWER STATE DOLLARS ARE AVAILABLE TO ADDRESS OTHER CRITICAL ISSUES. THIS HAS COME AT A TIME WHEN THE STATE IS FACED WITH THE MOST SERIOUS ECONOMIC CONDITIONS IN HISTORY.

LOUISIANA HAS TAKEN MEASURES TO ASSUME AS MUCH RESPONSIBILITY AS POSSIBLE IN DEALING WITH FLOODING PROBLEMS. IN 1983 THE LEGISLATURE CREATED THE STATEWIDE FLOOD CONTROL PROGRAM. THIS PROGRAM PROVIDES AN INNOVATIVE APPROACH TO DEALING WITH PROJECTS ON A PRIORITY BASIS. IT REQUIRES A DEMONSTRATION OF NEED AND AN EVALUATION OF TECHNICAL AND FINANCIAL MERIT PRIOR TO FUNDING APPROVAL

FUNDING SHORTAGES HAVE HINDERED THE STATEWIDE FLOOD CONTROL PROGRAM IN ACCOMPLISHING ITS GOALS. THE CITIZENS OF THIS STATE HAVE RECENTLY PASSED LEGISLATION WHICH CREATES A TRANSPORTATION TRUST FUND. THIS TRUST FUND PROVIDES AN ASSURED FUNDING SOURCE OF APPROXIMATELY $20 MILLION ANNUALLY

FOR THE STATEWIDE FLOOD CONTROL PROGRAM. EVEN THIS AMOUNT IS ONLY A DROP IN THE BUCKET WHEN COMPARED TO THE DEMONSTRATED NEED. STUDIES HAVE INDICATED THAT THE STATE WILL NEED TO INVEST $50 MILLION TO $100 MILLION ANNUALLY TO SIGNIFICANTLY REDUCE FLOOD LOSSES IN LOUISIANA

IN ADDITION TO CONSIDERING THE ECONOMIC IMPACTS THAT PROVIDING FOR FLOOD PROTECTION PLACES ON THE STATE, IT SHOULD ALSO BE REMEMBERED THAT LOUISIANA RANKS #1 AMONG ALL STATES IN THE NUMBER OF FEMA CLAIMS PAID SINCE THE INCEPTION OF THE NATIONAL FLOOD INSURANCE PROGRAM. IN 1983 ALONE, ONE-FOURTH OF ALL CLAIMS PAID NATIONALLY WERE PAID TO LOUISIANA RESIDENTS. A GREATER INVESTMENT OF FEDERAL MONIES IN FLOOD PREVENTION ACTIVITIES WOULD HAVE A POSITIVE DOLLAR FOR DOLLAR RETURN TO THE FEDERAL GOVERNMENT.

LOUISIANA IS ALSO FACED WITH THE UNIQUE SITUATION OF HAVING TO DEAL WITH MANY COASTAL RELATED PROBLEMS SUCH AS HURRICANE PROTECTION AND THE LOSS OF COASTAL WETLANDS. FORTY PERCENT OF THE COASTAL WETLANDS WITHIN THE CONTINENTAL UNITED STATES ARE IN LOUISIANA. IT IS IN THIS 40% THAT 80% OF THE NATIONAL MARSH LOSS IS TAKING PLACE. THIS AVERAGES APPROXIMATELY 40 ACRES PER YEAR. THE CORPS OF ENGINEERS HAS ESTIMATED THAT BY THE YEAR 2040 LOUISIANA'S COASTLAND COULD RETREAT AS MUCH AS 33 MILES IN SOME AREAS. THIS WOULD BE A LOSS OF MORE THAN 1 MILLION ACRES. THIS IS A MULTI-BILLION DOLLAR THREAT WHEN IMPACTS ARE CONSIDERED ON COMMERCIAL

FISH AND WILDLIFE HARVESTS, THE NEED TO PROTECT EXISTING DEVELOPMENT, DIMINISHED JOB OPPORTUNITIES ETC.

CURRENTLY, OUR LOCAL LEVEE DISTRICT HAS BEEN ASKED TO PAY APPROXIMATELY $12,000,000 OF AN $18,000,000 LEVEE ENLARGEMENT PROJECT. TO DO SO WOULD REQUIRE LEVYING ADDITIONAL TAXES ON AN ECONOMICALLY DISTRESSED AREA OVER THE NEXT TEN YEARS, WHICH WE FEEL WOULD BE DEVASTATING TO MANY OF OUR TAXPAYERS

WE HAVE ASKED THE CORP TO CONSIDER OUR ABILITY TO PAY, HOWEVER, IT SEEMS THAT THE COMPUTED BENEFITS DO NOT CONSIDER ACTUAL LOCAL ECONOMIC FACTORS.

IN CONCLUSION, WE ASK THAT THE SENATE TAKE A CLOSE LOOK AT THE WAY ABILITY TO PAY IS DETERMINED SO THAT WE CAN ONCE AGAIN MOVE AHEAD WITH THESE VITALLY NEEDED PROJECTS AND DEAL WITH SOME OF THE MOST SERIOUS FLOODING PROBLEMS IN THE NATION

STATEMENT OF THE CITY OF WEST MEMPHIS

ARKANSAS

P. O. BOX 1728

WEST MEMPHIS, ARKANSAS 72303

TO THE

SENATE SUB-COMMITTEE ON WATER RESOURCES, TRANSPORTATION AND INFRASTRUCTURE

ON BEHALF OF CHANGES

TO THE

ABILITY-TO-PAY CRITERIA

FOR

FLOOD CONTROL PROJECTS

STATEMENT OF KEITH INGRAM

THE HONORABLE DANIEL P. MOYNIHAN
SENATE SUB-COMMITTEE ON WATER RESOURCES
TRANSPORTATION AND INFRASTRUCTURE

Testimony regarding Section 103(M) of the Water Resources Development Act of November 17, 1986, (P.L. 99-662) Ability-to-Pay Provisions in the Federal Regulations.

Mr. Chairman and Members of the Committee:

I am the Mayor of West Memphis, Arkansas, a community of approximately [illegible],000 people, located on the Mississippi River in Crittenden County.

For the last seventeen (17) years we have been trying to get flood relief through an authorized Corps project known as the West Memphis and Vicinity Project. We have suffered numerous and significant flood damage over this time, and the problem worsens each year. On Christmas Day, 1987, a disastrous flood struck that forced 1,200 people, who were mostly low income individuals, from their homes and caused the death of one our our citizens. Since that time, some of these same people have been flooded on an annual basis, the most recent of which was February 2, 1990. We are not talking about new development, but about old established neighborhoods where many of the residents first settled, have since raised their families, and are now retired. These people do not have the resources to just pick up and move, even if they did, they would not be able to sell their houses. They must sit back, watch the frequency of flooding increase and continue to hear about new flood studies being funded. They have simply lost hope that an affordable solution can be found.

Our flooding problem is due mainly to the St. Francis Basin levee that cuts our natural drainage off from the Mississippi River. This levee system was built to protect us from flood waters from as far away as Montana and New York. While the levee has protected us from these floods it has caused our "in town" flooding problem that grows worse as our community and the ones north of us grow. This run-off, rather than draining naturally through the eastern part of our town, must take a torturous forty (40) mile trip through overgrown bayous and drainage ditches to get to an outlet. This drainage system is simply inadequate. Interstate highways 55 and 40 run through our City. The run-off from this system, plus from all of the associated truck stop facilities that have sprung up around us was not envisioned when the levee was built and the water was re-routed forty (40) miles south of West Memphis.

We have not just sat back and cried for help. Since the 1987 flood we have cleaned out over thirteen (13) miles of ditches in and around the City. We constructed a flapgate levee to protect a small portion of our town, and we have undertaken numerous drainage improvement projects throughout the City. In fact, we have done this at a fraction of the Corps projected cost, as well as in a timely manner. In short, we have spent $1.8 million over the last three years to bring existing drainage systems up to acceptable standards. We have replaced or expanded inadequate systems, and planned for the future by trying to forecast future drainage needs by drawing up a tough new drainage ordinance. We have acted on every recommendation that the Corps has made. We are at the point where we have done absolutely everything we can on our own to help ourselves. In fact, we have spent ourselves into a rut, our streets are failing because we have had to shift our small amount of tax dollars to our drainage program.

We have finally seen some movement on the West Memphis and Vicinity Project and the Corps might be in a position later this year to begin bidding the work out. However, we still have one more obstacle to overcome, and that is coming up with our "fair share" of the cost. Eastern Arkansas is comprised of some of the poorest areas in the nation. Our farmers are reluctant to donate the needed right of way. Recent decisions of several Federal agencies, including the Corps, designating nearly 90 percent of Crittenden County as wetlands have scared our farmers to death. They are reluctant to grant additional lands to help us given this problem. Furthermore, we have already obtained the needed right of way inside our city limits, so monies must be spent many miles downstream and outside our community. This will be a tremendous cost burden on the local sponsor. We are faced with a classic catch 22 situation. We can not afford not to do this project, but as the cost share requirements are set forth it will cause an economic hardship that our community might not survive. It is a dilemma of whether our community will be destroyed by flooding or through over extended debt. Our community recently was in the final selection process by two Fortune Fifty companies. Their decision was scheduled to be made the first week of February. That weekend rains forced families to evacuate their homes. These industrial prospects declined to locate here even though their sites were high and dry. I believe that the publicity of the flooding hurt us in these two instances. So you see what we are asking for is not a handout, not just a project to relieve flooding in affected areas but a chance at economic development. A belief and commitment that our community can grow and prosper. One that will be a net contributor instead of a funding drain. Furthermore, we do not believe the Assistant Secretary's criteria for determining the ability of a local interest to pay are responsive to the intent of the authorizing legislation.

It seems that the intent of Congress was that there be no non-federal cost sharing imposed on non-federal interest if they do not have the ability to pay. This is reflected in a statement in Senate Report No. 99-126 on page sixty-nine (69) which states, "Beneficial projects should not, however, be rejected simply because non-federal interests lack the resources to finance a share development cost".

We urge you to closely examine the existing criteria being used and the original intent of Congress when this legislation was drawn up. We believe that you will see some changes need to be made. For our part, we support the position of the Executive Committee of the Lower Mississippi Valley Flood Control Association in proposing per capita income criteria as a more fair method of determining local shares.

Thank you for your time and consideration.

Respectfully submitted,

Keith M. Ingram
Mayor Keith Ingram
April 19, 1990

STATEMENT OF
MARC GABOR, NATIONAL LEGISLATIVE REPRESENTATIVE
UNITED MINE WORKERS OF AMERICA

ON

WATER RESOURCES DEVELOPMENT
CORPS OF ENGINEERS

BEFORE THE

WATER RESOURCES, TRANSPORTATION AND
INFRASTRUCTURE SUBCOMMITTEE

SENATE ENVIRONMENT AND PUBLIC WORKS COMMITTEE

APRIL 19, 1990

MR. CHAIRMAN, SENATOR SYMS, MEMBERS OF THE SUBCOMMITTEE:

MY NAME IS MARC GABOR AND I AM NATIONAL LEGISLATIVE REPRESENTATIVE FOR THE UNITED MINE WORKERS OF AMERICA. ON BEHALF OF THE 250,000 MEMBERS OF OUR UNION, I WANT TO THANK YOU FOR HOLDING THIS HEARING TODAY TO ADDRESS NOT ONLY ONE OF OUR NATION'S MOST PRESSING NEEDS, BUT ALSO WHAT IS LITERALLY THE LIFELINE OF THE COAL INDUSTRY--THE COUNTRY'S INLAND WATERWAY NAVIGATION SYSTEM. A VIABLE SYSTEM IS KEY TO CONTINUED EMPLOYMENT IN THE COAL FIELDS OF APPALACHIA AND THE MIDWEST, AS WELL AS FOR THE DOMESTIC AND INTERNATIONAL COAL MARKETS.

I CAN NOT STRESS STRONGLY ENOUGH THE IMPORTANCE OF THE LOCKS AND DAMS IN THE OHIO RIVER VALLEY TO THE CONTINUED VIBRANCY OF THE NATION'S COAL MINE COAL OPERATIONS. A CLEAR INDICATION OF OUR COMMITTMENT AND THE SIGNIFICANCE TO WHICH WE ATTACH THE NEED TO MODERNIZE THESE STRUCTURES, IS THAT UMWA PRESIDENT RICHARD TRUMKA IS PLEASED TO SERVE AS A MEMBER OF THE BOARD OF DIRECTORS OF DINAMO. AS YOU KNOW, THE SOLE REASON FOR DINAMO'S EXISTENCE IS TO WORK WITH YOU AND OTHER DECISION MAKERS AT ALL LEVELS OF GOVERNMENT TO HELP MAKE THESE NEEDED CAPITOL IMPROVEMENTS A REALITY. THIS EFFORT REPRESENTS LABOR AND MANAGEMENT WORKING TOGETHER.

SPECIFICALLY, TODAY THE UMW WANTS TO LEND ITS FULL SUPPORT TO THE RECOMMENDATIONS MADE IN THE DINAMO TESTIMONY TO AUTHORIZE MODERNIZATION OF MCALPINE LOCK AND DAM ON THE OHIO RIVER NEAR JEFFERSONVILLE, INDIANA AND LOUISVILLE, KENTUCKY;

LOCKS AND DAMS 2, 3, AND 4 ON THE MONONHAGELA RIVER IN WESTERN PENNSYLVANIA; AND MARMET LOCK AND DAM ON THE KANAWHA RIVER IN WEST VIRGINIA.

I WOULD LIKE TO DRAW THE COMMITTEES ATTENTION TO THE BROAD BI-PARTISAN SUPPORT FOR THESE PROJECTS SHOWN BY YOUR COLLEAGUES LAST WEEK AND THIS WEEK. THEIR PARTICIPATION UNDERSCORES THE CRITICAL NEED. I WOULD LIKE TO PUBLICLY THANK THEM ON THE RECORD ON BEHALF OF THE UMWA FOR THEIR CONTINUED SUPPORT.

ALTHOUGH NONE OF THESE PROJECTS HAS YET RECEIVED A FINAL REPORT OF THE CHIEF OF ENGINEERS, EACH IS AT A CRITICAL STAGE IN THE PLANNING PROCESS. MCALPINE, FOR EXAMPLE, IS PENDING AT THE BOARD OF REVIEW AND A FINAL REPORT IS EXPECTED BY THIS SUMMER. EACH OF THE PROJECTS WOULD BENEFIT BY COMPRESSING THE TIME REQUIRED FOR CONSTRUCTION IF THEY WERE INCLUDED IN THE 1990 WATER RESOURCE AUTHORIZATION BILL.

RECOGNIZING THE EXTRAORDINARY NATURE OF OUR REQUEST, YET ALSO REALIZING THE CRITICAL NEED FOR THESE PROJECTS AND THE FACT THAT THERE IS PRECEDENT, WE RESPECTFULLY URGE THE COMMITTEE TO GIVE ADVANCE AUTHORIZATION TO THESE FIVE PROJECTS ON THE OHIO RIVER SYSTEM.

THANK YOU MR. CHAIRMAN.

WISCONSIN CENTRAL LTD.

OFFICE:
One O'Hare Centre
6250 North River Road
Rosemont, IL 60018
Tel. (708) 318-4600

MAILING ADDRESS:
P.O. Box 5062
Rosemont, IL 60017-5062

TESTIMONY OF EDWARD A. BURKHARDT

PRESIDENT

WISCONSIN CENTRAL LTD.

FOR RECORD OF HEARINGS BEFORE THE

HOUSE PUBLIC WORKS AND TRANSPORTATION COMMITTEE

SUBCOMMITTEE ON WATER RESOURCES

APRIL 24, 1990

MY NAME IS EDWARD A. BURKHARDT. I AM PRESIDENT OF WISCONSIN CENTRAL LTD., A REGIONAL RAILROAD OPERATING IN THE STATES OF MICHIGAN, MINNESOTA, WISCONSIN AND ILLINOIS AND IN THE PROVINCE OF ONTARIO. WISCONSIN CENTRAL OPERATES OVER 2,062 MILES OF RAILROAD AND SERVES APPROXIMATELY 600 ON-LINE SHIPPERS.

WISCONSIN CENTRAL COMMENCED OPERATIONS IN 1987, AFTER PURCHASING THE PROPERTY FROM THE SOO LINE, A LARGE CLASS I CARRIER. WISCONSIN CENTRAL IS A LIGHT DENSITY RAILROAD, WITH AVERAGE REVENUES OF LESS THAN $50,000 PER MILE COMPARED WITH A CLASS I AVERAGE OF $221,000 PER MILE. THE SOO COULD NOT OPERATE THESE LINES PROFITABLY; HENCE THEIR DECISION TO SELL.

IN THE TWO YEARS SINCE COMMENCING OPERATIONS, WISCONSIN CENTRAL HAS INCREASED AND IMPROVED SERVICE AND LOCOMOTIVES AND CAR EQUIPMENT AND INVESTED APPROXIMATELY $22,000,000 IN TRACK IMPROVEMENTS. WE WERE SELECTED AS THE NATION'S BEST CUSTOMER SERVICE RAILROAD IN 1989 IN A POLL OF OVER 5,000 FREIGHT SHIPPERS CONDUCTED BY DISTRIBUTION MAGAZINE. OUR BUSINESS HAS INCREASED OVER 23% OVER THE PAST TWO YEARS AS A RESULT OF OUR EFFORTS TO SERVE OUR CUSTOMERS BETTER.

DURING THE SAME PERIOD OUR EMPLOYMENT INCREASED 13% TO A PRESENT LEVEL OF APPROXIMATELY 900 PEOPLE. WE PRIDE OURSELVES ON HAVING A HIGHLY PRODUCTIVE, CUSTOMER ORIENTED WORK FORCE WITH A HIGH DEGREE OF JOB SECURITY.

A COPY OF OUR SYSTEM MAP IS ATTACHED AS AN EXHIBIT.

WISCONSIN CENTRAL WOULD LIKE TO GO ON RECORD IN SPECIFIC OPPOSITION TO THE PROPOSED $2,850,000 APPROPRIATION FOR DREDGING AND OTHER IMPROVEMENTS TO ONTONAGON HARBOR, MICHIGAN. FURTHER, WE PROPOSE NO RIVER OR HARBOR PROJECTS REQUIRING PUBLIC FUNDS BE AUTHORIZED, WHERE PRIVATELY FINANCED COMPETITIVE MODES OF TRANSPORATION WILL BE ADVERSELY AFFECTED WITHOUT AN OBJECTIVELY CONDUCTED STUDY SHOWING PUBLIC BENEFITS IN EXCESS OF PUBLIC COSTS. FINALLY, WE PROPOSE THAT THE COST OF SUCH PROJECTS BE RECOVERED IN ITS ENTIRETY BY PROJECT-SPECIFIC USER FEES.

WISCONSIN CENTRAL OPERATES A 78-MILE BRANCH LINE TERMINATING AT WHITE PINE, MICHIGAN, ABOUT 19 MILES BY HIGHWAY FROM ONTONAGON. THE ONLY CUSTOMER ON THE RAIL LINE IS A LARGE COPPER MINE AT WHITE PINE.

THE SOO LINE HAD DISCONTINUED SERVICE TO WHITE PINE FOR SEVERAL YEARS PRIOR TO THE SALE OF THE LINE TO WISCONSIN CENTRAL BY ESTABLISHING A PROHIBITIVE FREIGHT RATE SURCHARGE ON ALL CARS HANDLED. THERE IS SUFFICIENT RAW MATERIAL TRAFFIC MOVING TO WHITE PINE TO MAKE THIS LINE ECONOMICALLY VIABLE, AND WISCONSIN CENTRAL'S POLICY HAS BEEN TO CONVERT THE RAW MATERIAL MOVEMENTS TO RAIL THROUGH SERVICE AND PRICING COMPETITION.

WISCONSIN CENTRAL WAS SUCCESSFUL IN CONVERTING THE MOVEMENT OF 56,700 TONS OF IRON PYRITES IN 1989 TO RAIL, BUT THIS IS NOT SUFFICIENT TO MAKE THE WHITE PINE BRANCH VIABLE. THE OTHER MOVEMENT OF RAW MATERIALS IS COAL, PRESENTLY DELIVERED BY LAKE VESSEL TO ONTONAGON AND TRUCKED TO WHITE PINE. IN 1989 WE QUOTED A RATE THE SHIPPER TOLD US WAS EQUAL TO DELIVERED TOTAL COSTS BY WATER, BUT THE SHIPPER INSISTED ON A BETTER RATE. OUR ECONOMICS WOULD NOT PERMIT A FURTHER RATE REDUCTION.

ONTONAGON HARBOR HANDLED 235,198 TONS OF CARGO IN 1988, THE LAST YEAR FOR WHICH THE ARMY CORP OF ENGINEERS HAS PUBLISHED STATISTICS, VIRTUALLY ALL BEING INBOUND COAL. THE PROPOSED IMPROVEMENTS COSTING $2,850,000 RESULT IN A $12.12 PER TON SUBSIDY, ASSUMING THE SAME ANNUAL TONS HANDLED. WISCONSIN CENTRAL'S PROPOSED RATE FOR HANDLING THIS COAL 575 MILES FROM CHICAGO, STOCKPILING, AND DELIVERING AS REQUIRED TO THE COPPER COMPANY IS $6.00 PER TON. WE CAME CLOSE TO PUTTING THIS MOVEMENT ON THE RAILS EVEN WITH THE FEDERAL SUBSIDY IN PLACE, BUT FAILED BECAUSE WE COULD NOT COME UP WITH A "BETTER" DELIVERED COST.

ABSENT THE COAL, WE ARE STUCK WITH A MONEY-LOSING BRANCH LINE. THE INEVITABLE RESULT IS AN ABANDONMENT, EVEN IN THIS CASE WHERE THE RAIL OPTION IS THE MOST COST-EFFECTIVE.

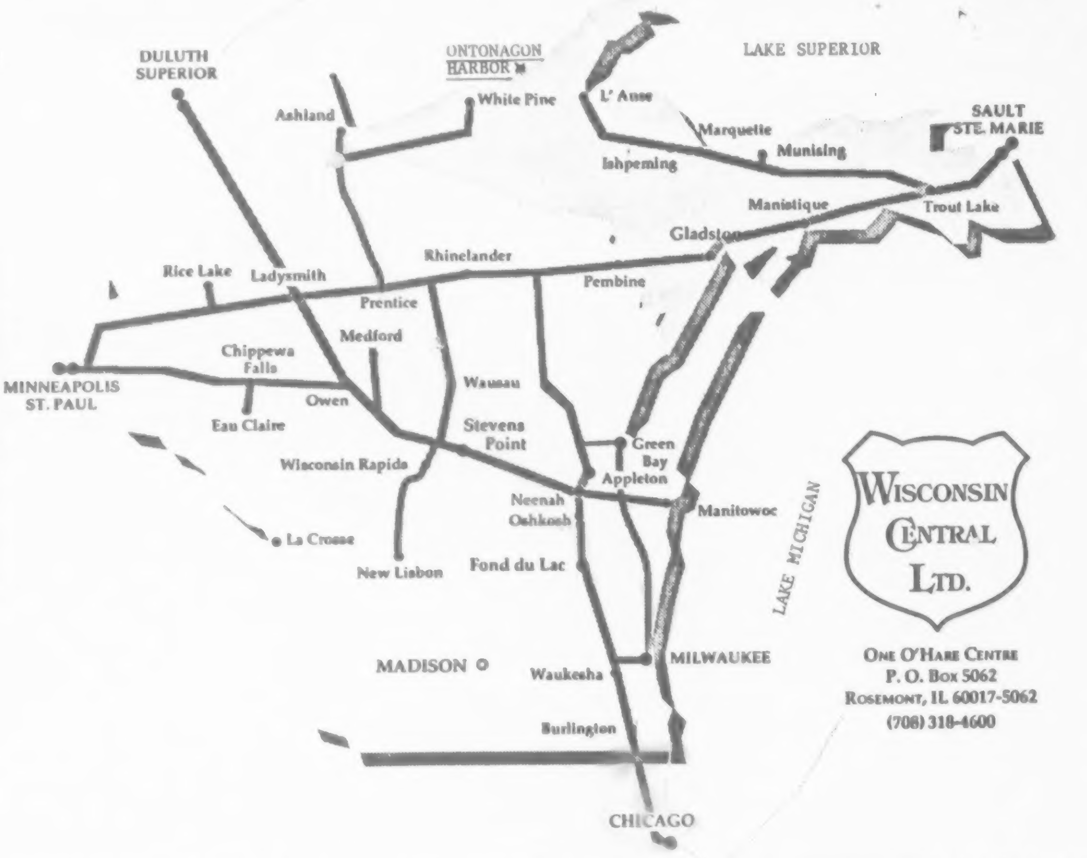
THESE FEDERAL SUBSIDIES ARE OFTEN WASTEFUL AND UNECONOMIC. THE ONTONAGON HARBOR SITUATION IS SUCH THAT EVERY POUND OF FREIGHT PRESENTLY MOVING BY WATER COULD MOVE BY RAIL AT CONSIDERABLY LOWER COST, WHILE SAVING THE RAPIDLY DWINDLING RAIL INFRASTRUCTURE.

WE HAVE NOT EVEN CONSIDERED THE GREAT ENVIRONMENTAL COST OF LARGE SCALE DREDGING OF A RIVER MOUTH ON THE SHORE OF LAKE SUPERIOR, A REGION WITH A VERY FRAGILE ECOSYSTEM. WE MUST ALSO CONSIDER THE LARGE FEDERAL DEFICIT, AND THE DEMONSTRATED DETRIMENTAL EFFECT OF THESE EXPENDITURES.

IN THE ABSENCE OF A REPORT OF THE PUBLIC BENEFIT FROM THE PROPOSED EXPENDITURES AND OF THE ADVERSE EFFECT ON EXISTING COMPETITIVE TRANSPORTATION ALTERNATIVES, THE ONTONAGON HARBOR PROJECT SHOULD NOT PROCEED. ACCORDINGLY, WE REQUEST THAT THE ONTONAGON HARBOR PROJECT BE DELETED, AND THE OTHER MEASURES SUGGESTED TO PROTECT VITAL RAIL SERVICES BE ADOPTED BY THIS COMMITTEE.

THANK YOU FOR THIS OPPORTUNITY TO MAKE OUR VIEWS KNOWN.

EXHIBIT TO TESTIMONY OF EDWARD A. BURKHARDT
PRESIDENT OF WISCONSIN CENTRAL LTD.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